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ABSTRACT

Presented is the 1975-76 evaluation report of the Alexandria Program for the Gifted and Talented, a multi-dimensional approach to the differentiated education of children in grades 4 through 6 with exceptional abilities in both the cognitive and artistic areas. It is explained that the evaluation study consisted of four activities: replication of the student testing program, replication of the parent survey, development and execution of a survey of regular classroom teachers, and design and execution of a comparison study. Methodology and results for each of the four activities are considered separately. Listed among conclusions are that the program is performing well beyond the stated standards in academic achievement and creativity; that the students were found to have generally healthy, normal self concepts which changed very little over the academic year, in accordance with the program design; and that the comparison study gave specific support to the program's selection criteria in the area of academic achievement. Appended materials include a description of instruments used in the study, an explanation of statistical terms, a summary of parent comments, and specimen copies of parent and teacher survey forms. (SBH)

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Design Exploration for Talented Elementary Students

Evaluation 1975-76

ED166863

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ALEXANDRIA PUBLIC SCHOOLS

PROGRAM FOR THE GIFTED AND TALENTED

FINAL EVALUATION REPORT

FOR

YEAR TWO: 1975-1976

SUBMITTED BY

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August 1976

DESCRIPTION OF THE PROGRAM

The *Alexandria Program for the Gifted and Talented* represents a multi-dimensional approach to the differentiated education of children with exceptional abilities in both cognitive and artistic areas—employing a number of strategies to challenge these persons in the teaching-learning process. The program is an experimental effort, exploring the effectiveness of three separate *program options* which employ methodology and materials which differ from those found in a conventional education center. These are:

Interest Activity: Students leave their regular classroom and come to an area where a specially trained teacher assists the pupils in the planning and conducting of activities in their areas of exceptionality—including mathematics, language arts, social studies, science and kinesthetics. The emphasis is upon identification of topics which are of natural interest to the pupils and the execution of projects which are within these areas of interest.

Curriculum Area Learning Center: is an area set aside for differentiated education in four academic curriculum areas: mathematics, language arts, social students and science. A specially trained teacher prepares an advanced class in one of these four areas; pupils leave their regular classroom for instruction in as many of the areas as they have been judged to have exceptionality. Instruction in the *Curriculum Learning Center* (C. L. C.) takes the place of instruction in each subject in the regular classroom. Pupils may participate in the C. L. C. in from one to four areas.

Enrichment involves the augmentation of the exceptional child's regular classroom work; a *Helping Enrichment Person* (H. E. P.) assists the regular classroom teacher by providing resources (materials, methods and counsel) which would enrich the exceptional child's in-class work. The H. E. P. is to work with the teacher approximately 60% of the time and devote the remaining 40% to working directly with pupils.

Children from grades 4 through 6 enter the program through two routes after being nominated by parents, teachers and/or community persons.

Academic Area: A gross screening committee reviews the nominee's school record, including grades and test information. Those who meet the gross screening criteria are given further testing by the school psychologist (after parental permission is given). Based on an individual report prepared by the school psychologist, a final selection committee determines entry to the program.

Arts Area: A jury, composed of teachers in each talent field (vocal music, instrumental music, visual arts and kinesthetics) reviews the past works of the nominee—through audition, performance or portfolio—and makes recommendations to the final screening committee for entry into the program.

Gifted and talented are considered as synonomous as far as the project is concerned; persons may participated in the academic or arts areas to the extent that they have evidence of exceptionality.

At each point in the selection process, parents retain the right of review and of appeal to a committeed chaired by the Assistant Superintendent of Instruction.

The three program options are located in the following schools:

Interest Activity: Stonewall Jackson, Mount Vernon and John Tyler.

Curriculum Learning Center: Charles Barrett, Lyles-Crouch, George Mason.

Enrichment: Patrick Henry, Douglas MacArthur (Grade 4 only), Robert E. Lee (Grades 5 and 6), William Ramsay.

A student is constrained to enter the program offered at the school to which he is assigned. (i.e., a student who is assigned to Charles Barrett School may only enter the CLC program option at that school.)

DESCRIPTION OF THE EVALUATION STUDY

This report covers Year 2 of a three-year study. During Year 1, extensive pupil testing and a survey of parents found significant and dramatic growth in the areas of academic achievement and creativity.

The Year 1 study resulted in the redesign of both the program and the evaluation study:

- Parents expressed a desire to receive more *information* about the program. Accordingly, a variety of information dissemination activities were begun during Year 2, including publications and evening parent sessions.
- Parents expressed some degree of concern that regular classroom teachers did not support the program. Accordingly, the Year 2 evaluation effort was expanded to include a comprehensive survey of teachers.
- The Year 1 study indicated that pupils in the program had normal social relations, self-concept and attitude toward learning. Therefore the program set performance standards for Year 2 in each of these areas to ensure that pupils did not deviate from this normal, healthy state.
- The Year 1 study yielded information on growth in creativity and academic achievement which was used to set performance standards for Year 2 in these areas.
- The evaluation design used in Year 1 permitted comparisons only among the three treatment options. The high cost and time burden of the student testing program precluded an experimental design that contained a control group. However, state and local achievement testing made it possible during Year 2 to compare pupils in the program with those in the general population. Thus, a comparison group study was incorporated into the evaluation design.

Therefore, during Year 2 (1975-1976) the evaluation study consisted of four principal activities:

- *Replication of the student testing program* using measures of academic achievement, creativity, social relations, self-concept, and attitude toward learning. The analysis would however, compare program performance with *standards* set in conjunction with the Title III ESEA office.
- *Replication of the parent survey.*
- *Development and execution of a survey of regular classroom teachers* which would seek their professional observations about the program and its effects in a form that would be comparable with the parent study.
- *Design and execution of a comparison study* which would examine achievement test scores over a two year period, contrasting pupils in the *G & T* program with those in the general population.

The next section presents the results obtained from each of these areas of inquiry.

ANALYSIS OF STUDENT TEST DATA

The student test data was gathered at the beginning of the school year (pretest) and at the close of the year (post test). This study replicates the study conducted in Year 1 (1974-1975). Approximately 400 children have four data points, tracking their progress over the two years of the program's operation. At the conclusion of Year 3 (1976-1977) extensive analyses will be conducted which will be of great usefulness to educators and researchers, enabling them to design and evaluate improved programs to serve our nation's most gifted and talented children.

This current study seeks to use the data base to compare the progress of pupils with *a priori* performance objectives.

METHODOLOGY: Five separate tests were administered to all students participating in the program for the Gifted and Talented:

- *Piers-Harris Children's Self Concept Test*
- *FIRO-BC,* an instrument which assesses interpersonal relations among children.
- *S. R. A. Achievement Series*
- *About Me,* an instrument which measures attitude toward learning
- *Torrance Tests of Creative Thinking*

These instruments are described in detail in Appendix A of this report.

The testing requires a considerable amount of class time as shown below:

- Piers-Harris: 30 minutes
- FIRO-BC: 15 minutes
- About Me: 10 minutes
- Torrance Tests: 60 minutes
- S. R. A. Achievement Series: 240 minutes

The study of parent attitudes in both Year 1 and Year 2 raised some concern about "excessive testing." The evaluator and the program staff are quite sensitive to these feelings and carefully reviewed the student testing program. The following points support their decision to continue the testing:

- For 4th and 6th graders, the fall SRA testing is *mandated* by state and local regulations.
- The "About Me" instrument specifically asks the child if he "likes," "dislikes" or is indifferent to the testing program; only 2% of the children indicated that they disliked the tests. Further, 35% indicated that they liked the testing; the remaining 63% were indifferent.
- The collection of a broad base of information beyond academic achievement is strongly encouraged by the Title III authorities who fund the project.
- The collection of self-concept and social relations data is necessary to examine the oft-cited hypothesis that programs for the gifted and talented foster "elitism."

The staff took steps to minimize reactivity to the testing procedures. Several teachers reported that the Torrance tests (which encourage creative expression) are widely considered to be "fun" by the pupils. The effort to reduce reactivity is meeting with success: in Year 1, 27 parents complained about the testing program, while in Year 2, only 5 parents registered such complaints.

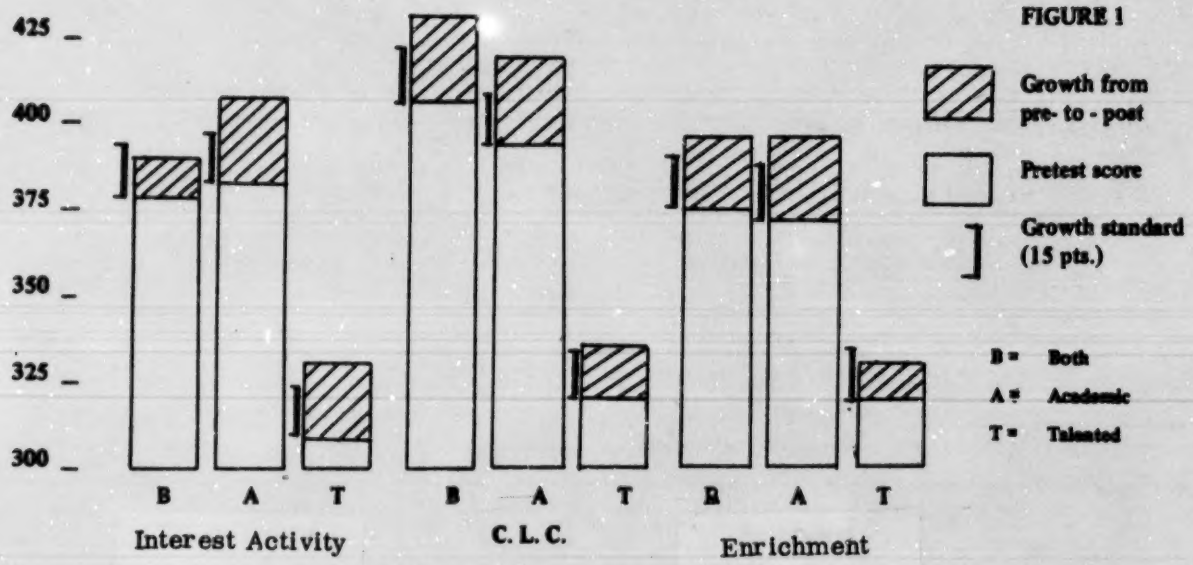
The tests were scored by the evaluator's staff and the resulting data were coded and punched onto computer cards. The analysis was performed on the C. D. C. 6400 machine at the University of Virginia Computing Center, using programs specifically constructed for this evaluation study.

The results for each of the instruments are presented below:

1. *SRA Achievement Series:* The following standard was set for pupil performance, as contained in the Evaluation Plan submitted to the Title III, ESEA authorities:

   "By the end of the 1975-1976 school year, the academic achievement of the Title III ESEA students will gain more than 15 points on the growth scale of the composite measure of the SRA Achievement Series."

Figure 1, below presents the group means for each of the three program options:



The data show that all groups met the performance standard with the exception of two groups:

- Persons in the interest activity subgroup who participate in *both* Academic and Talented activities.
- Persons in the enrichment subgroup who participate only in the Talented activities.

Of these, the former experienced a gain of 12.1 points, approaching the performance standard. The data were subjected to analysis of variance* Three significant effects were found:

- *Groups Main Effect* (p L.T. .05): the academic group was significantly higher than talented group.
- *Options Main Effect* (p L.T. .05): the C.L.C. group was, in general, higher than the other groups. This is not, however, due to effects of the program since these children began and finished the year with higher scores.
- *Trails Main Effect* (p L.T. .05): all combinations of groups and gifts (i. e., academic or talented) experienced significant growth over the year.

The absence of significant interactions between groups or gifts and trials indicates that all children progressed at a relatively uniform rate, as far as the *composite* measure was concerned. This indicates that the pupils progress at an *even* development in their academic training without undue emphasis in any one subject-area.

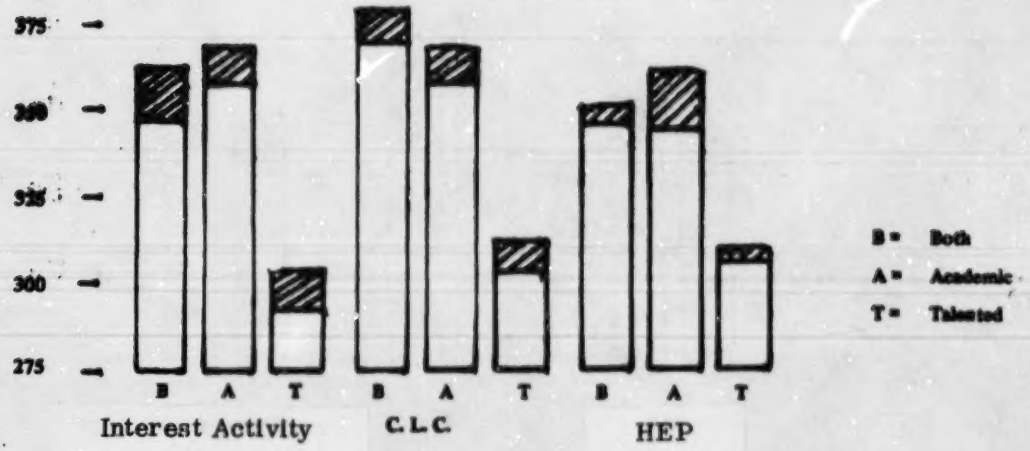
Three principal subtests are combined to produce the composite measure: reading, mathematics and language arts. The results from these subtests are described below—although no formal performance objectives were set for them.

a. *Reading Subtest:* Figure 2, next page, shows the basic summary statistics for the reading subtest.

The data show relatively modest gains in reading achievement, except within the enrichment group. When subjected to analysis of variance, the data revealed four significant effects:

*See Appendix B for an explanation of analysis of variance terminology.

FIGURE 2: SRA READING SUBTEST



- *Gifts Main Effect* (p L.T. .01): the academic pupils had much higher scores than the talented pupils.
- *Options Main Effect* (p L.T. .05): the C.L.C. students had generally higher scores than the other two groups both at the beginning and the end of the study.
- *Trials Main Effect* (p L.T. .05): all groups experienced reliable growth from pre- to post-test.
- *Trials by Group Interaction* (p L.T. .05): the enrichment group, particularly the pupils in talented activities, had a slightly lower rate of growth than the C.L.C. and IA groups.

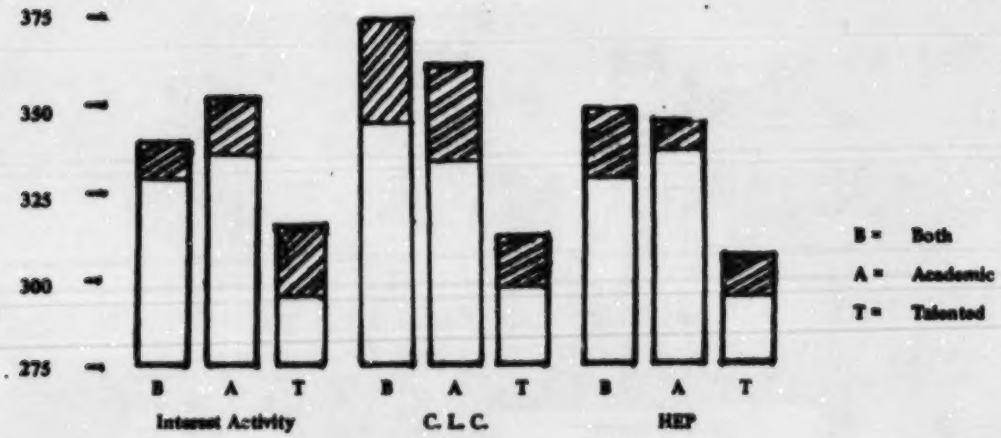
These findings should be interpreted in light of the fact that these pupils are already reading at an advanced level—generally well beyond the ninth grade. The data do not indicate major problems in the area of reading—although some "fine tuning" especially in the enrichment group may be done by the program staff.

b. *Mathematics Subtest:* Figure 3, next page, shows the basic summary statistics for the mathematics subtest.

The data show relatively substantial gains in mathematics achievement across the three groups. The analysis of variance yielded three significant effects:

- *Gifts Main Effect* (p L.T. .01): the academic pupils had much higher scores than the talented children.
- *Trials Main Effect* (p L.T. .05): all groups experienced reliable growth from pre- to post-test.
- *Groups by Gifts by Trials Interaction* (p L.T. .05): the C.L.C. academic pupils experienced a higher rate of growth than the other groups. Talented pupils, regardless of group advanced at a uniform rate.

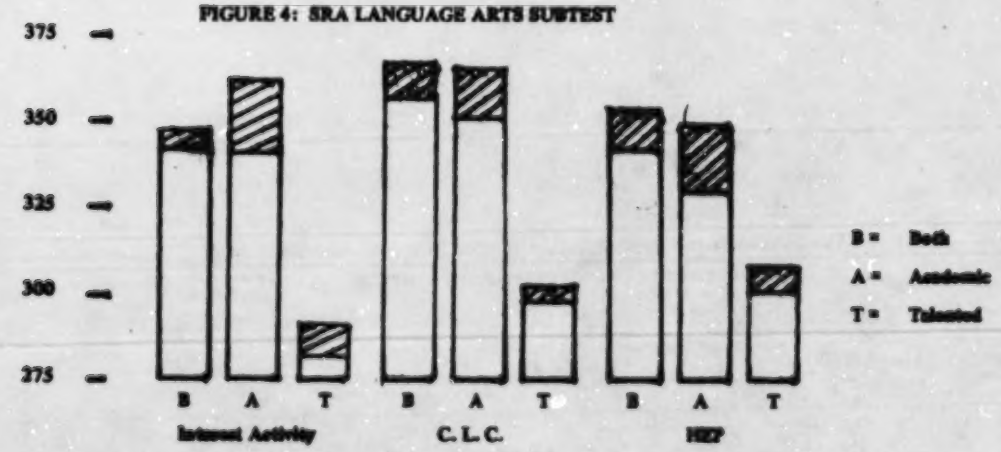
FIGURE 3: SRA MATHEMATICS SUBTEST



The data indicate that the pupils in the program for the Gifted and Talented are achieving at high levels in the area of mathematics.

c. *Language Arts Subtest:* Figure 4, below, shows the basic summary statistics for the language arts subtest:

FIGURE 4: SRA LANGUAGE ARTS SUBTEST



The data show moderate gains in language arts achievement. The analysis of variance yielded three significant effects:

- *Gifts Main Effect* (p L.T. .01): the academic pupils had much higher scores than the talented pupils.
- *Trials Main Effect* (p L.T. .05): all groups experienced reliable growth from pre- to post-test.
- *Gifts by Trials Interaction* (p L.T. .05): the academic pupils had a higher rate of growth than the talented pupils.

The data, therefore, indicate that the pupils are receiving acceptable instruction in the language arts.

Overall, the S. R. A. data present a well-balanced picture of growth in academic achievement across three basic skill areas. Further, this growth is commensurate with the abilities of the pupils.

2. *Torrance Tests of Creative Thinking:* The analysis of creativity is subject to much debate; the discussion of the Torrance measure contained in Appendix A illustrates the complexity and multiple interpretations of the concept of "creativity." There is no single or aggregate measure of creativity which is analogous to the role of the composite scale of the SRA Series in the area of achievement. Accordingly, the performance standard for creativity has been set for each of the four subtests of the Torrance package, as follows:

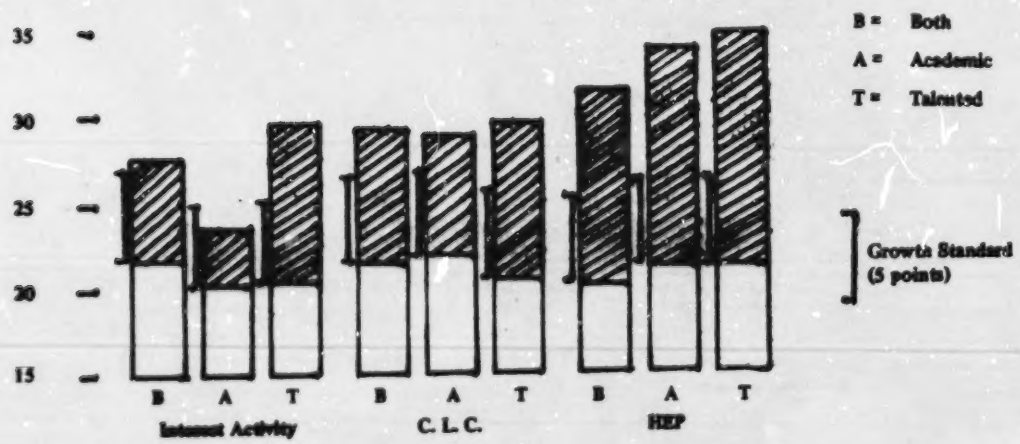
"By the end of the 1975-1976 school year, Title III ESEA students in each group will have an increase of five points in mean score on each subtest of the Torrance Tests of Creative Thinking."

A discussion of each of the four subtests follows:

a. **Fluency Subtest:** Each of the Torrance tests pose a series of problems ("make as many things as you can out of a series of circles"). Fluency represents the number of relevant responses—thus, a person with a high fluency score can be described as one who can envision a large quantity of alternatives in a given situation.

Figure 5 shows the summary statistics for the fluency subtest:

FIGURE 5: FLUENCY SUBSCALE



The data in Figure 5 show that all subgroups with the exception of the academic subgroup of the interest activity met the performance standard. When subjected to analysis of variance, two significant effects were found:

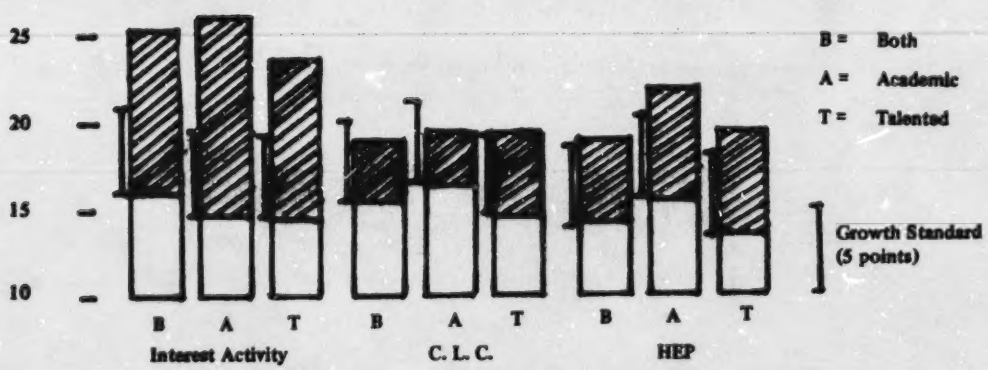
- *Trials Main Effect* (p L.T. .01): all groups experienced reliable growth from pre- to post-test.
- *Groups by Trials Interaction* (p L.T. .01): although all groups started at approximately the same point, the enrichment group experienced a much greater (*i.e., almost double*) rate of growth.

Although all groups did well, *the enrichment group exhibited exceptional performance on the fluency scale.*

B. **Flexibility Subtest**: for each of the Torrance problems, "flexibility" represents the bility of the subject to respond using a wide variety of categories. Using the example given above, a person could achieve a high "fluency" score by using the circles to draw a large number of faces; however, to achieve a high "flexibility" score, the subject would have to use the circles in a broad variety of ways such as a face, a clock, a table, the sun, etc. Thus a person with a high flexibility score can be considered one who can envision a wide *variety* of distinctive alternatives in a situation.

Figure 6 shows the summary statistics for the flexibility subtest:

FIGURE 6: FLEXIBILITY SUBSCALE



The data in Figure 6 show that all subgroups met the growth standard with the exception of:

- Persons in the C.L.C. group who are participating in both academic and talented activities.
- C.L.C. pupils who are involved in academic activities only.

When subjected to analysis of variance, the flexibility data revealed three significant sources of variation:

- *Groups Main Effect* (p L.T. .05): the interest activity group is considerably higher than the other two groups.
- *Trials Main Effect* (p L.T. .01): all groups experience meaningful and reliable growth between the pre- and post-test.
- *Groups by Trials Interaction* (p L.T. .01): although all groups started at approximately the same level, the interest activity subgroup experienced approximately one-and-one-half times as much growth as the C.L.C. and enrichment groups.

Thus, the data show growth in all groups *but with special impact on the interest activity group.*

c. **Elaboration Subtest**: the figural form of the Torrance tests includes a scale which measures "elaboration"—or the extent to which the subject provides detail in the drawings. For example, if a face was drawn, the respondent would receive additional points as he added recognizable features such as eyes, ears, nose, eyebrows, earrings, birthmarks and the like. Thus a person exhibiting high elaboration scores would be one with keen attention to detail.

Figure 7 presents the summary statistics for the elaboration subtest:

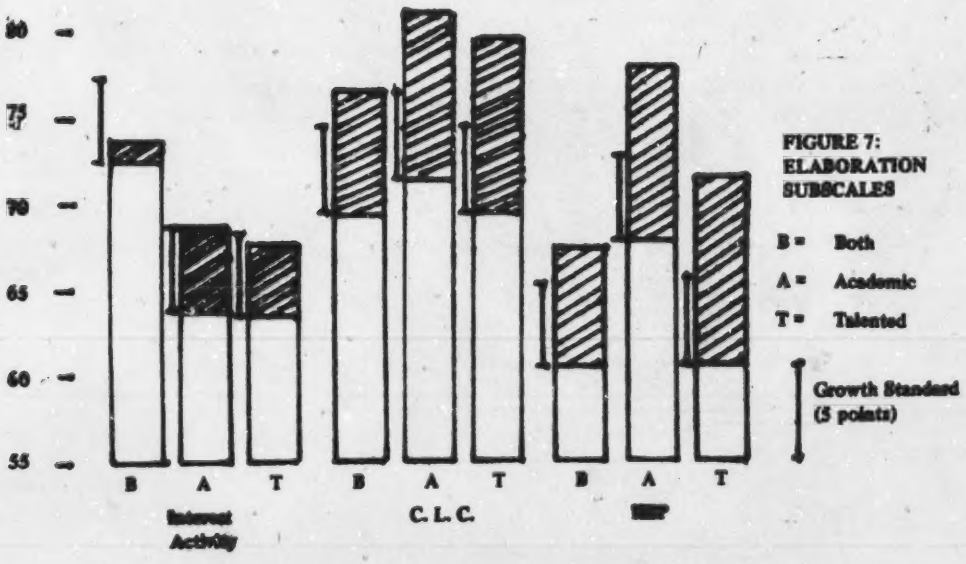


FIGURE 7: ELABORATION SUBSCALES

All groups met the performance standard with the exception of:

- Persons in the interest activity who participate in both academic and talented activities—although in fairness, this group started with extremely high scores.
- Pupils in the interest activity talented option who gained 4.1 points, approaching the standard.

When subjected to the analysis of variance, three significant sources of variation were found in the data:

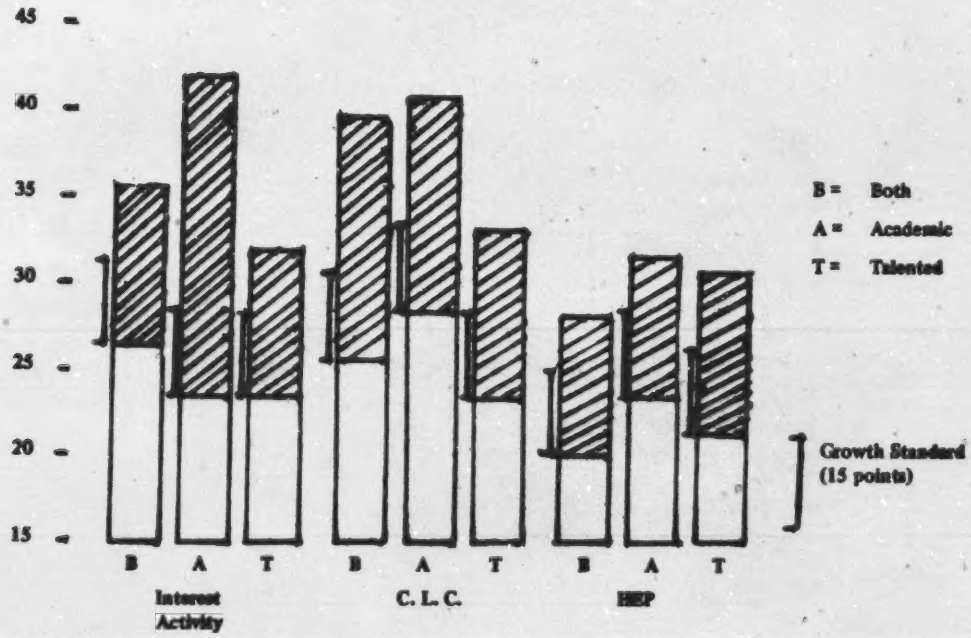
- *Trials Main Effect* (p L.T. .03): indicating that all groups exhibited reliable growth from pre- to post-test.
- *Groups Main Effect* (p L.T. .05): the C.L.C. group had higher scores than the other two groups on either pre- or post test.
- *Groups by Trials Interaction* (p L.T. .05): the C.L.C. and enrichment groups experienced a higher rate of growth than the interest activity group.

Thus, the data support the hypothesis that the Gifted and Talented Program had beneficial effects for all pupils in the "elaboration" aspects of creativity--*and that the C.L.C. students seemed to be most affected.*

d. Originality: each of the problems on the Torrance tests is accompanied by extensive background data which permits an assessment of the degree to which a particular response is uncommon or "unusual," thus defining "originality" in terms of relative frequency. A person with a high originality score may be considered as one who can envision a variety of novel alternatives in a given circumstance.

Figure 8 presents the summary statistics for the originality subtest scores:

FIGURE 8: ORIGINALITY SUBSCALE



The data show that *all groups exceeded the performance standard,* often by two or times. Clearly, the program has a strong effect in the area of originality.

The analysis of variance revealed three significant effects:

- *Trials Main Effect* (p L.T. .01): all groups experienced large and reliable gains from pre- to post-test.
- *Groups Main Effect* (p L.T. .05): considering both pre- and post-tests, the IA and C.L.C. groups had slightly higher scores than the enrichment pupils.
- *Groups by Trials Interaction* (p L.T. .05): the IA and CLC groups experienced almost twice the growth rate as the enrichment groups.

Thus, the data indicate that all groups experienced meaningful and substantial increases in their orginality scores—with pupils in the IA and CLC benefiting somewhat more than those in the enrichment group.

Summary for the Torrance Tests: these data provide an interesting contrast between the three program options:

- *Interest Activity* shows a distinctive effect on the "flexibility" subtest.
- *Curriculum Learning Center* shows a distinctive effect on the "elaboration" subtest.
- *Enrichment* shows a distinctive effect on the "fluency" subtest.

In addition, all three groups show great progress on the "originality" subtest.

Thus, the data are explicit in showing that the three program options develop different aspects of "creativity." Since the differences are very clear, the program staff should examine the content of the curriculum in each program option to identify any elements which might help to understand these results.

For example, the C.L.C. option is perhaps the most structured of the options—does this foster attention to detail that would show up on the elaboration subtest? Similarly, do the group-initiated projects in the interest activity develop flexibility? Why does enrichment affect fluency?

The answers to these questions would provide valuable guides to educators seeking to design new programs for the gifted and talented.

Thus, the data indicate that the program has met its performance objectives and is developing "creativity" in the gifted and talented pupils.

3. **FIRO-BC (Social Relations):** the FIRO-BC instrument provides a unique opportunity for examining social relations from the point of view of the individual. The instrument is described in detail in Appendix A. It contains six subscales which measure the degree to which three aspects of social relations—*inclusion, control* and *affection*—are both expressed and wanted by the subject. The instrument uses several ingenious devices to minimize misleading or compliant responding. Further, norms are available for children of the age group under consideration.

The program design does not *directly* intend to impact on the pupils' social relations—rather, the program's intent is to foster the development of academic achievement and creativity without any concomitant deterioration of the child's socialization in the form of elitism, withdrawal, inferiority or stigmatization.

Accordingly, having determined that the pupils were experiencing "normal" social relations during Year 1, the program resolved not to disturb the situation by setting the following performance objective:

> *"By the end of the 1975-1976 school year, the social relations of 85% of the Title III ESEA students will not deviate from the norm by more than one standard error of measurement on each of the subscales of the Fundamental Interpersonal Relation Orientation Inventory for the Behaviors of Children (FIRO-BC)."*

> The *standard error of measurement* is an indicator of the tolerance level in the scores that may be attributed to error due to the testing process itself: fatigue, misunderstanding of questions or directions, failure to use the response procedures correctly, and the like.

For the FIRO-BC, the standard error of measurement (S.E.M.) is approximately one point, varying slightly among the six subtests. Using these figures, the data from the 1975-1976 post test were analyzed to show the relative position of each of the program subgroups in terms of distance from the norm expressed in terms of S.E.M. units.

For example, for the inclusion/expressed subscale (I-E), the norm is 5.05 and the standard error is .93. Thus, a student with a score of 4 would be approximately 1 SEM *below* the norm; similarly, a student with a score of 7 would be 2 SEM *above* the norm.

The results of this analysis are presented in Table 1, below; since these *full* results from the six subtests are rather complicated, they are summarized in Table 2, showing clearly the performance of the program with respect to the standard.

TABLE 1: DISTRIBUTION OF 1975-1976 POST TEST SCORES ON THE FIRO-BC WITH RESPECT TO NORMS, EXPRESSED IN STANDARD ERROR OF MEASUREMENT (SEM) UNITS. PERCENTAGES ARE SHOWN IN PARENTHESES

		EXPRESSED INCLUSION (I-E)			WANTED INCLUSION (I-W)		
		Less than -1 SEM	-1 SEM to +1 SEM	More than +1 SEM	Less than -1 SEM	-1 SEM to +1 SEM	More than +1 SEM
IA	Both	1 (.03)	34 (.87)	4 (.10)	4 (.10)	32 (.82)	3 (.08)
	Academic	3 (.08)	32 (.89)	1 (.03)	1 (.03)	30 (.83)	5 (.14)
	Talented	12 (.10)	105 (.88)	2 (.02)	15 (.12)	102 (.86)	2 (.02)
CLC	Both	7 (.09)	70 (.86)	4 (.05)	6 (.07)	70 (.87)	5 (.06)
	Academic	3 (.05)	47 (.82)	7 (.17)	3 (.05)	50 (.88)	4 (.07)
	Talented	13 (.13)	81 (.83)	4 (.04)	7 (.07)	83 (.85)	8 (.08)
HEP	Both	1 (.02)	42 (.88)	5 (.10)	2 (.04)	36 (.75)	10 (.21)
	Academic	4 (.09)	37 (.86)	2 (.05)	3 (.07)	31 (.72)	9 (.21)
	Talented	7 (.10)	59 (.83)	5 (.07)	5 (.07)	61 (.86)	5 (.07)

		EXPRESSED CONTROL (C-E)			WANTED CONTROL (C-W)		
		Less than -1 SEM	-1 SEM to +1 SEM	More than +1 SEM	Less than -1 SEM	-1 SEM to +1 SEM	More than +1 SEM
IA	Both	7 (.18)	31 (.79)	1 (.03)	9 (.23)	28 (.72)	2 (.05)
	Academic	8 (.14)	48 (.84)	1 (.02)	10 (.28)	25 (.69)	1 (.03)
	Talented	19 (.16)	95 (.80)	5 (.04)	23 (.19)	91 (.76)	5 (.04)
CLC	Both	9 (.11)	69 (.85)	3 (.04)	14 (.17)	64 (.79)	3 (.04)
	Academic	3 (.05)	43 (.75)	11 (.19)	15 (.26)	41 (.72)	1 (.02)
	Talented	7 (.07)	85 (.87)	6 (.06)	27 (.28)	69 (.70)	2 (.02)
HEP	Both	10 (.21)	37 (.77)	1 (.02)	3 (.06)	41 (.85)	4 (.08)
	Academic	9 (.21)	32 (.74)	2 (.05)	16 (.37)	25 (.58)	2 (.05)
	Talented	19 (.27)	41 (.69)	3 (.04)	14 (.20)	54 (.76)	3 (.04)

		EXPRESSED AFFECTION (A-E)			WANTED AFFECTION (A-W)		
		Less than -1 SEM	-1 SEM to +1 SEM	More than +1 SEM	Less than -1 SEM	-1 SEM to +1 SEM	More than +1 SEM
IA	Both	2 (.05)	36 (.92)	1 (.03)	2 (.05)	34 (.87)	3 (.08)
	Academic	6 (.17)	28 (.78)	2 (.06)	0 (0)	27 (.75)	9 (.25)
	Talented	10 (.08)	102 (.86)	7 (.06)	10 (.08)	102 (.86)	7 (.06)
CLC	Both	9 (.11)	68 (.84)	4 (.05)	4 (.05)	70 (.86)	7 (.09)
	Academic	5 (.09)	48 (.88)	4 (.07)	3 (.05)	51 (.90)	3 (.05)
	Talented	5 (.05)	84 (.86)	9 (.09)	4 (.04)	84 (.86)	10 (.10)
HEP	Both	6 (.13)	41 (.85)	1 (.02)	2 (.04)	38 (.79)	8 (.17)
	Academic	7 (.16)	34 (.79)	2 (.05)	1 (.02)	40 (.93)	2 (.05)
	Talented	4 (.06)	65 (.92)	2 (.03)	8 (.11)	60 (.85)	3 (.04)

TABLE 2: COMPARISON OF YEAR 2 POST TEST FIRO-BC SCORES WITH THE PERFORMANCE STANDARD.
TABLE ENTRIES ARE THE PERCENTAGE OF PUPILS THAT ARE WITHIN
ONE STANDARD ERROR OF MEASUREMENT ABOVE OR BELOW THE ESTABLISHED NORM
FOR EACH SUBSCALE. THE PERFORMANCE STANDARD IS 85%
ALL CASES WHERE THE SCORES *FAIL* TO MEET THE STANDARD ARE CIRCLED.

		I-E	I-W	C-E	C-W	A-E	A-W
IA	Both Academic and Talented	87	(82)	(79)	(72)	92	87
	Academic Only	89	(83)	(84)	(69)	(78)	(75)
	Talented Only	88	86	(80)	(76)	86	86
CLC	Both Academic and Talented	86	87	85	(79)	(84)	86
	Academic Only	(82)	88	(75)	(72)	(84)	90
	Talented Only	(83)	85	87	(70)	86	86
HEP	Both Academic and Talented	88	(75)	(77)	85	85	(79)
	Academic Only	86	(72)	(74)	(58)	(79)	93
	Talented Only	(83)	86	(69)	(76)	92	85

These results show that the program has come very close to meeting the overall performance standard (i.e., many of the "deficient" categories are within one or two percentage points of the standard). However, the *pattern* of the deficiencies is worth investigation. (Figure 9 gives a graphical presentation of the basic summary statistics for the FIRO-BC data, which will aid in the analysis.)

a. **Inclusion**: although deficiencies were observed on this, their magnitude was quite small. Reference to Figure 9 shows that the group means were quite close to the norm. Thus, the data do not indicate serious problems in inclusion–*the degree to which pupils act to include others in activities or desire to be included in group activities.*

b. **Control**: both the *expressed* and *wanted* subscales failed to meet the performance standard for a large number of the program options–by large margins.

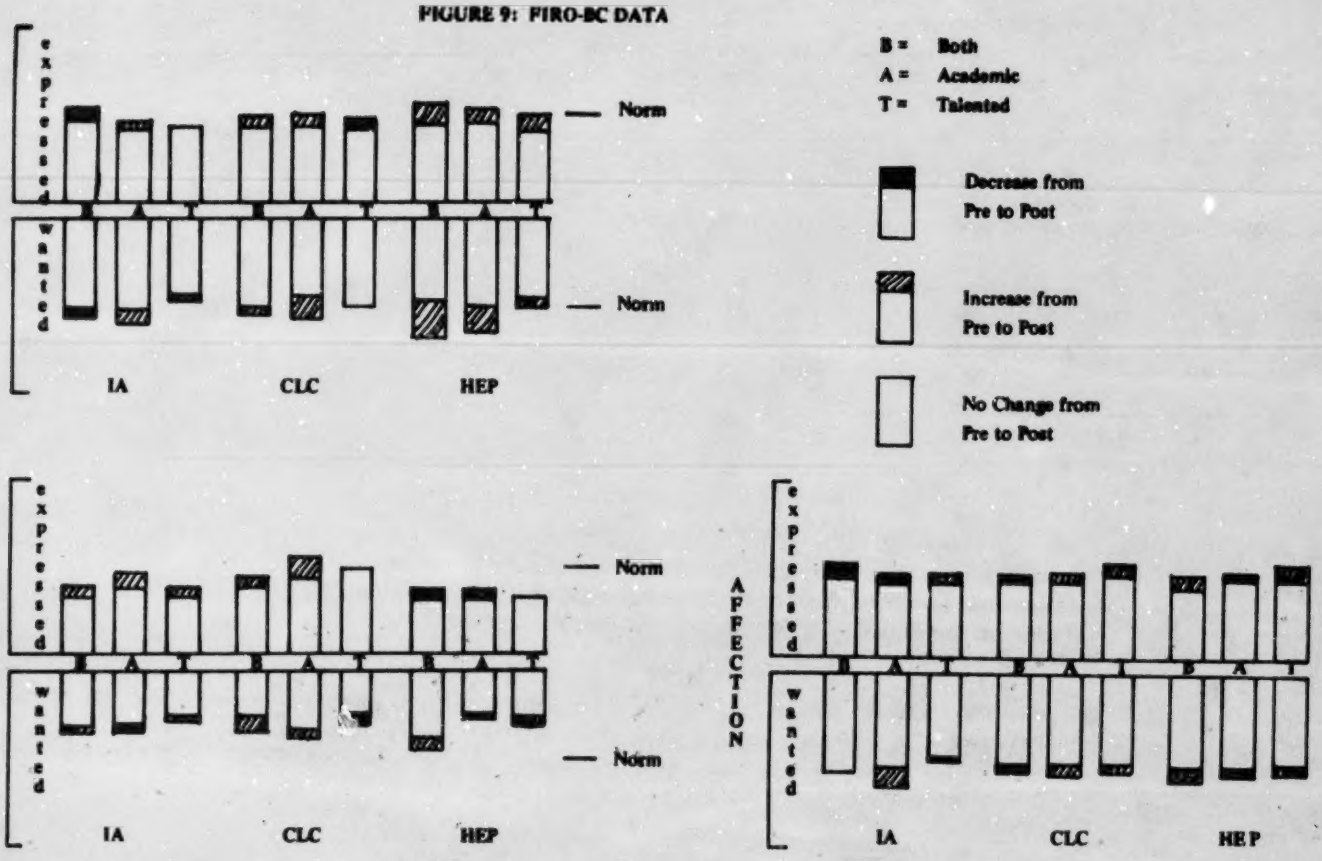
- The *expressed* control subscale measure *assertiveness*–or the degree to which the subject acts to control the behaviors of others. Reference to Figure 9 shows that all groups are at or below the norm indicating that the children in the program cannot be considered to be domineering–*in fact, they exhibit an unusual lack of this trait.*
- The *wanted* control measures *dependence* or the degree to which the subject wishes others to control his/her behavior (i.e., low score indicates "independence"). Reference to Figure 9 shows that all groups are considerably below the norm–indicating that the pupils in the Gifted and Talented Program *show a considerable and unusual amount of independence.*

c. **Affection**: deficiencies were found primarily on the "expressed" affection subscale, which measures the extent to which the subject manifests positive sentiments toward others. Reference to Figure 9 shows that all groups are quite close to the norm; further reference to Table 2 shows that the absolute magnitude of the deficiencies were quite small. *Thus, the data do not indicate serious problems in the degree to which pupils in the program handle affection.*

It is, however, possible to look at the data in another way–by "gift." Reference to Table 2 shows that:

- 13 or the 28 observed deficiencies are within the "academic only" option.
- 21 of the 28 observed deficiencies are within the "both" or "academic only" options.

FIGURE 9: FIRO-BC DATA



Thus, the academic group seems to have a high degree of association with deficiencies across the FIRO-BC subscales. Of these, a pattern appears–all "academic only" groups are lower than the norm on the C-E, C-W, and A-E subscales, indicating:

- *low assertiveness*
- *high independence*
- *low expression of affection*

These three traits (particularly the last) might be considered as "elitism" by some observers, such as teachers. *These traits are, however,* **not extreme,** *and do not support any hypotheses that the program fosters elitism.*

In summary, of the 34 comparisons of pupil performance on the FIRO-BC subscales, 28 were found to be deficient with respect to the standard. Of these, eight were within three percentage points of the standard. Further, fourteen of the others were found on the *control* subscales where analysis of the content showed that the pupils, in general, had low assertiveners and high independence–hardly undesirable traits.

Further, it was determined that the pupils in the academic option shared a low expressed affection, low assertiveness and high independence–factors which might be considered "elitism" by some–*although they are not of a magnitude that would be considered abnormal."*

Thus, the program for the Gifted and Talented has not contributed to problems in social relations.

4. **Piers-Harris Children's Self Concept Test**: the famous "Coleman Report" was among the first investigations to link self-image–*the way a child feels about him/herself*–to academic achievement. Since then, a large number of studies have examined this phenomenon and its impact on progress in school. The research indicates that while low levels of self-concept are associated with low levels of achievement, the opposite is not true: extremely high self-concept does not necessarily lead to very high success in school. The theory behind this is:

- At low levels of self-concept, the child may have convinced himself that he is predetermined to failure–and not apply himself to the task at hand.
- At extremely high levels of self-concept, the child may either attempt problems beyond his capability or assume that tasks are trivial; either situation leads to problems in achievement.

Thus, the program for the Gifted and Talented has recognized that extremes in self-concept are to be avoided. Therefore, the following performance objective was set:

> *"By the end of the 1975-1976 school year, the self-concept of 85% of the Title III ESEA students will not deviate from the norm by more than one standard error of measurement as established for the Piers-Harris Children's Self-Concept Scale."*

The instrument was an eighty-point scale. For children of this age, and grade level, the norm is a score of 57. Further, the Standard Error of Measurement (S.E.M.) is 12 points:

- A person with a score of 65 would be withint one S.E.M. of the norm, as would be a person with a score of 46.
- A person with a score of 70 would be more than one SEM *above* the norm.
- A person with a score of 44 would be more than one SEM below the norm.

Table 3, below, presents the results of the analysis of the post test data for the 1975-1976 school year.

TABLE 3: DISTRIBUTION OF YEAR 2 POST TEST SCORES ON THE *PIERS-HARRIS* TEST WITH RESPECT TO THE NORM, EXPRESSED IN STANDARD ERROR OF MEASUREMENT (SEM) UNITS. PERCENTAGES ARE SHOWN IN PARENTHESES.

		Less than -1 SEM	-1 SEM to +1 SEM	More than +1 SEM
IA	Both	1 (.03)	32 (.82)	6 (.15)
	Academic	2 (.03)	48 (.84)	7 (.13)
	Talented	2 (.02)	102 (.86)	15 (.12)
CLC	Both	9 (.11)	69 (.85)	3 (.04)
	Academic	3 (.05)	50 (.88)	4 (.07)
	Talented	7 (.07)	85 (.87)	6 (.06)
HEP	Both	1 (.02)	41 (.85)	6 (.13)
	Academic	5 (.11)	37 (.86)	1 (.03)
	Talented	5 (.07)	61 (.86)	5 (.07)

Of the nine possible comparisons, only two fail to meet the performance standard. The deficiencies were noted within the academic portion of the interest activity subgroup; both were within three percentage points of the standard and involved a tendency toward elevated self-concepts.

Figure 10 presented a graphical description of the summary statistics for the Piers-Harris data. They show that the central tendencies of the comparison groups are slightly higher than the norm.

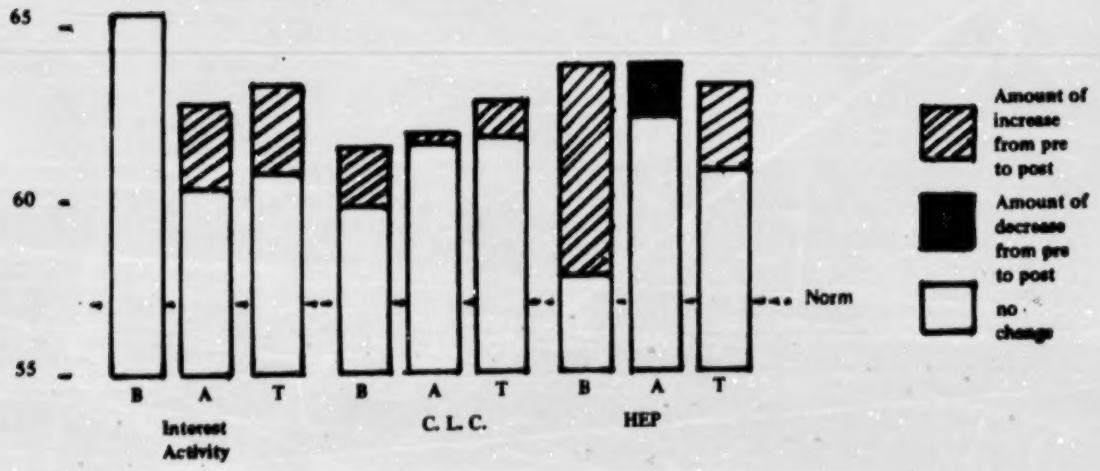
An analysis of variance revealed two significant sources of variation:

- *Groups by Trials* (p L.T. .05): the enrichment subgroup experienced more changes during the year than the other groups.

- *Groups by Gifts by Trials* (p L.T. .05): this was primarily due to the enrichment group where one subgroup experienced a large increase and another had a mild decrease from pre- to post.

On the whole, the data indicate that the pupils in the Gifted and Talented Program enjoy a healthy, normal self-concept which changed very little over the 1975-1976 academic year.

FIGURE 10: PIERS-HARRIS



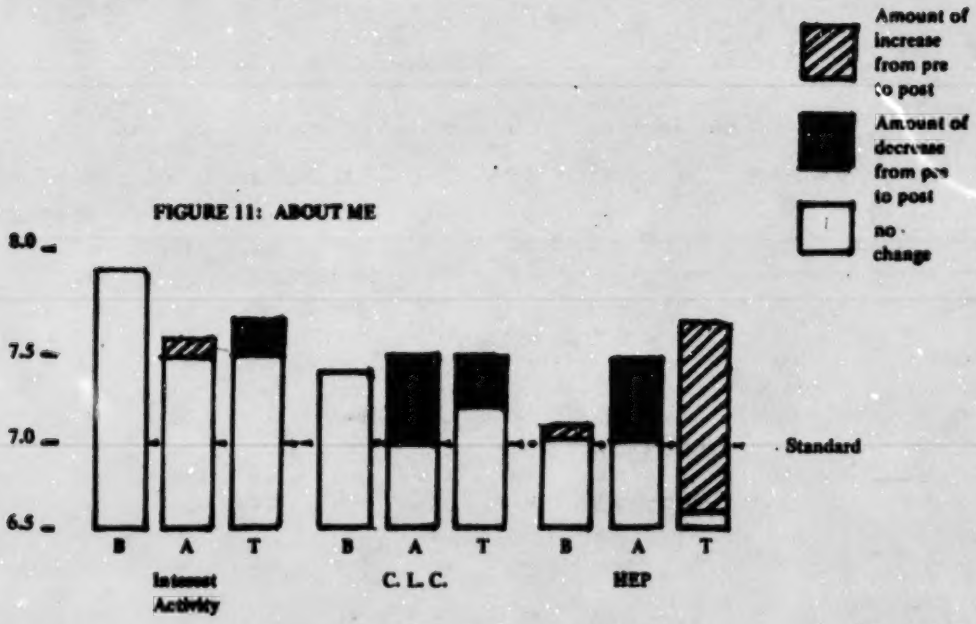
5. **About Me** *(Attitude Toward Learning)*: This instrument was constructed especially for the *Program for the Gifted and Talented* and recognizes that pupils with exceptional gifts are often bored with the learning process and thus develop poor attitudes toward the learning process. The test scores range from 0 to 10. Based upon results from the Year 1 study, the following performance standard was set:

"By the end of the 1975-1976 school year, all program designs for Title III ESEA students will have a mean score of 7 or better on **About Me** *(a brief checklist which assesses student attitudes toward learning)."*

Figure 11 presents the summary statistics for *About Me* (see next page). The data indicate that all groups met the performance standard. However, there were *decreases* in scores in all groups and the Year 2 means are about one point lower than those observed in Year 1. The analysis of variance confirmed these drops:

- *Trials* (p L.T. .05): there was an overall net decrease in About Me scores (i.e., losses outweighed gains).
- *Groups by Trials* (p L.T. .05): the C.L.C. group experienced greater losses in scores than the other groups.
- *Groups by Gifts by Trials* (p L.T. .05): this was primarily attributable to the enrichment group which showed substantial gains in the talented group and substantial losses in the academic group.

These data indicate that the program should devote some attention to student attitudes toward the learning process--particularly with the C. L. C. subgroup.



An Overall View of the Student Test Data

The program set performance standards for thirteen tests and subtests. There are nine subgroups that comprise the program; thus, there were (9 x 13 =) 117 possible comparisons of program performance with the standards.

Table 4 presents an overall summary of the data which has been presented in the preceeding pages. Each of the program options has been compared with the standard using three classifications:

- **Pass:** the option met or exceeded the standard.
- **Close:** the option did *not* meet the standard by was close to the standard (within 3 percentage points).
- **Fail:** the option did *not* meet the standard and was not close to it.

> *The reader should note that this analysis assumes an equal weight for all comparisons. In fact, the academic achievement and creativity tests might be considered by some to be more important than other measures. Further, the analysis does not allow for the interpretations of the FIRO-BC control subscales discussed above.*

A pass/fail ratio was computed for each option by dividing the number of "pass" and "close" by the number of "fails." In this analysis, the C.L.C. talented option had the best overal performance (12.00) and the IA academic had the worst (2.25).

Table 5 (next page) presents the pass/fail statistics by each of the major groups in the program. This table shows that the C. L. C. had the best performance (5.50) followed by IA (3.33) and enrichment (2.90). These differences indicate that there is substantial room for improvement in all options–although none are doing badly.

In summary, the student test data show encouraging results; on the other hand, they also show that the program still has room for formative development.

TABLE 4

	Interest Activity			Curriculum Learning Center			Enrichment					
	BOTH	AC	TAL	BOTH	AC	TAL	BOTH	AC	TAL	PASS	CLOSE	FAIL
SRA composite	close	pass	pass	pass	pass	pass	pass	pass	fail	7	1	1
Torrance fluency	pass	fail	pass	pass	pass	pass	pass	pass	pass	8	0	1
Torrance flexibility	pass	pass	pass	fail	fail	pass	pass	pass	pass	7	0	2
Torrance elaboration	fail	pass	close	pass	pass	pass	pass	pass	pass	7	1	1
Torrance originality	pass	pass	pass	pass	pass	pass	pass	pass	pass	9	0	0
FIRO - I/E	pass	pass	pass	pass	close	close	pass	pass	close	6	3	0
FIRO - I/W	close	close	fail	pass	pass	pass	fail	fail	pass	5	2	2
FIRO - C/E	fail	close	fail	pass	fail	pass	fail	fail	fail	2	1	6
FIRO - C/W	fail	fail	pass	fail	fail	fail	pass	fail	fail	1	0	8
FIRO - A/E	pass	fail	pass	close	close	pass	pass	fail	pass	5	2	2
FIRO - A/W	pass	fail	pass	pass	pass	pass	fail	pass	pass	7	0	2
Piers-Harris	close	close	pass	pass	pass	pass	pass	pass	pass	7	2	0
About Me	pass	pass	pass	pass	pass	pass	pass	pass	pass	9	0	0
Total Pass	7	6	10	10	8	11	10	9	9			
Total Close	3	3	1	1	2	1	0	0	1			
Total Pass & Close	10	9	11	11	10	12	10	9	10			
Total Fail	3	4	2	2	3	1	3	4	3			
Pass/Fail Ratio	3.33	2.25	5.50	5.50	3.33	12.00	3.33	2.50	3.33			

TABLE 5

PASS/FAIL STATISTICS BY GROUP

	Total Pass	Total Close	Total Pass & Close	Total Fail	Pass/Fail Ratio
Interest Activity	23	7	30	9	3.33
Curriculum Learning Center	29	4	33	6	5.50
Enrichment	28	1	29	10	2.90
Program Total	80	12	92	25	3.64

SURVEY OF PARENTS

The views, opinions and perceptions of the parents of children in the *Program for the Gifted and Talented* are important to the evaluation study: they provide a background for the interpretation of the student test data that permits the evaluation results to be interpreted in light of the observations of those who best know the child--the parent.

METHODOLOGY: the parent survey was a direct replication of a study done in Year 1 (1974-1975). The survey instrument was unchanged. Questionnaires were distributed to children in school who brought them home to the parents; the package included:

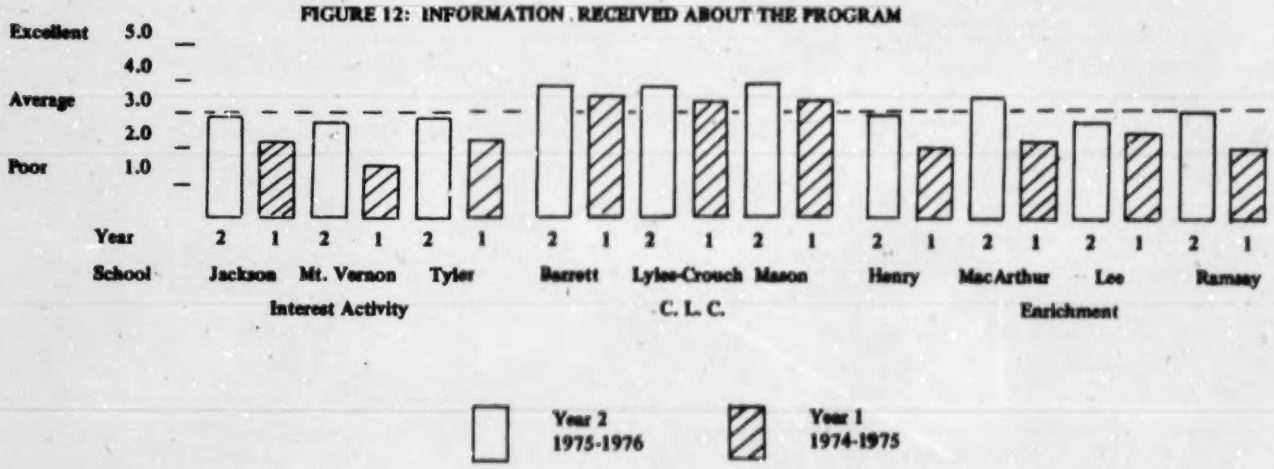
- A *cover letter* from Mr. Richard Hills explaining the purpose of the parent survey.
- The *Parent Survey Questionnaire* which is self-administering, containing its own directions.
- A *post-paid return envelope* in which the respondent was to mail the completed questionnaire directly to the evaluator.

The respondent was specifically cautioned not to place his or her name on the form, thus preserving the anonymity and confidentiality of the survey study. The forms were received, logged and coded for keypunching by the evaluator's staff. The data was keypunched subject to 100% key verification by A.M.S. Computing Systems of Rosslyn, Virginia. The data were analyzed by means of the S.P.S.S. statistical package as implemented on the CDC 6400 machine at the University of Virginia.

RESULTS AND CONCLUSIONS: Figures 12 to 16 show the major findings of the quantitative portion of the survey, comparing Year 1 (1974-1975) with Year 2 (1975 -1976). In general, parent reaction to the program was both favorable and consistent with previous findings:

1. **Information**: during Year 1, parents reported that they had received little or no information about the program. Accordingly, the program staff undertook a series of information-dissemination activities, such as the preparation of descriptive leaflets, encouragement of parent-teacher conferences and the holding of evening meetings to discuss the program. The fruits of these activities are show in Figure 12 below which indicates a significant improvement in the satisfaction of parents with information received about the program.

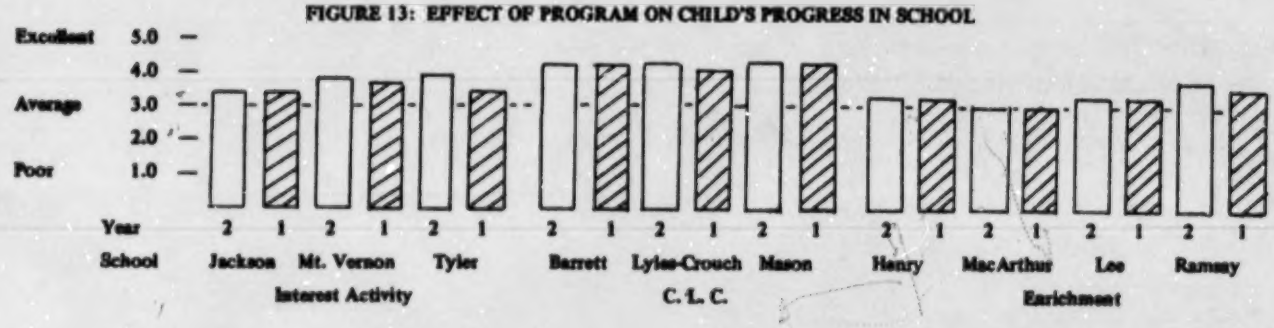
FIGURE 12: INFORMATION RECEIVED ABOUT THE PROGRAM



A shift in the nature of the "comments" offered by parents was also noted. During Year 1, the comments dealth with the lack of information about the *program* itself. During Year 2, the comments shifted to a desire for more information about the *individual progress* of the child. The combination of the quantitative and qualitative results leads to the conclusion that the parents now understand the program and have a desire to closely monitor their children's performance in it.

2. **Progress in School:** Figure 13 shows the school-by-school summary of the parents' assessment of the impact of the program on their children's progress in school.

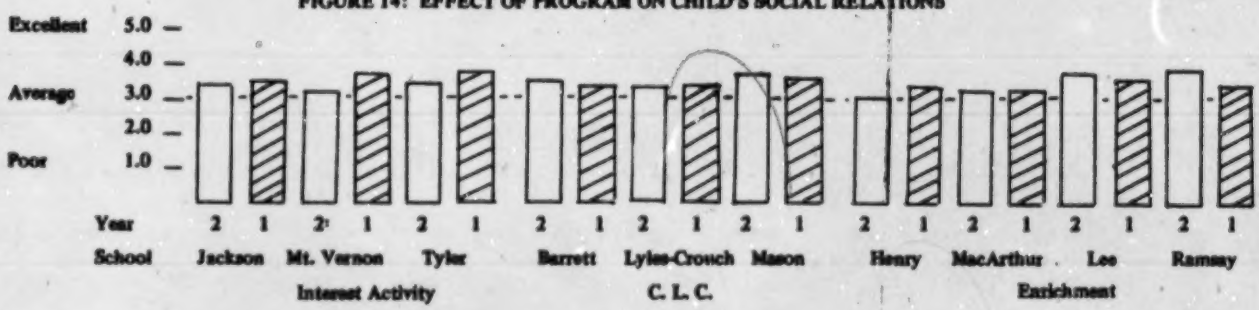
FIGURE 13: EFFECT OF PROGRAM ON CHILD'S PROGRESS IN SCHOOL



These results show that the parents are generally satisfied with the program's results in the area. The data are also consistent with the *absolute* level of S.R.A. achievement scores reported above *(c.f., Figure 1: in general, the C.L.C. schools have the highest scores followed by the IA and Enrichment schools).* Changes from Year 1 to Year 2 were concentrated in the IA schools, with both Mt. Vernon and Tyler receiving increased support from the parents.

3. **Social Relations:** Figure 14 shows the school-by-school summary of the parents' view of the impact of the program on their children's relationship with other pupils.

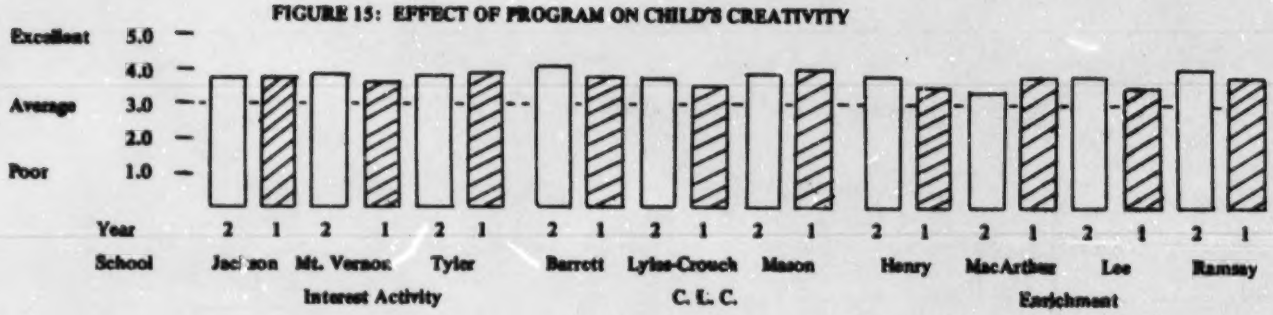
FIGURE 14: EFFECT OF PROGRAM ON CHILD'S SOCIAL RELATIONS



The data are quite uniform with very little variation among the schools. The ratings cluster around "average," underscoring the findings from the FIRO-BC data *(c.f., Figure 9 above),* in that the children's social relations appear to be "normal" with no indications of parent observations of "superiority," "elitism," "inferiority," or "isolation."

4. **Creativity:** Figure 15 shows the school-by-school summary of the parents' view of the impact of the program on their children's creativity.

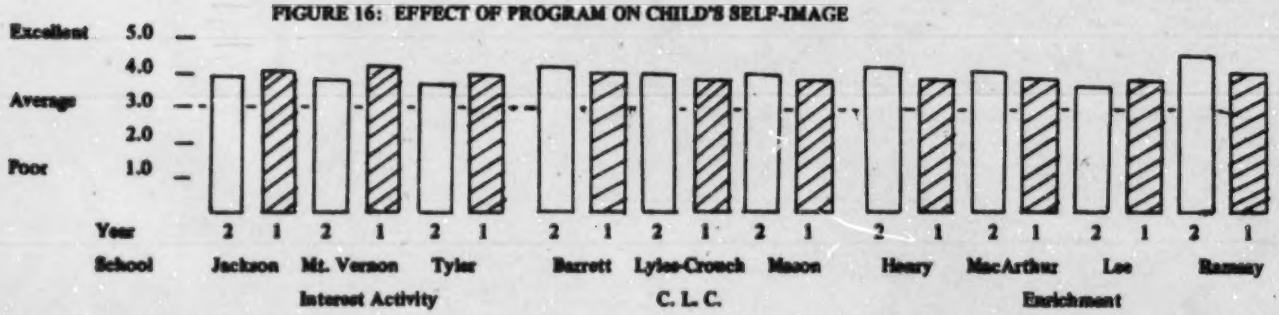
FIGURE 15: EFFECT OF PROGRAM ON CHILD'S CREATIVITY



The data are very uniform and do not reflect the differences observed on the elaboration, fluency and flexibility subscales of the Torrance tests *(c.f., Figures 5, 6, and 7 above)*. The parent views do, however, resemble the *originality* subscale of the Torrance *(c.f., Figure 8 above)*. These results serve to underscore the difficulty of discussing a complicated concept like "creativity"–indicating that the general public may focus on the "originality" aspect to the neglect of other components. However, the data show considerable parent satisfaction with the "creativity" shown by their children and almost no perceptible changes from views expressed in Year 1.

5. **Self-Concept:** Figure 16 shows the school-by-school summary of the parents' view of the impact of the program on their children's self-concept.

FIGURE 16: EFFECT OF PROGRAM ON CHILD'S SELF-IMAGE

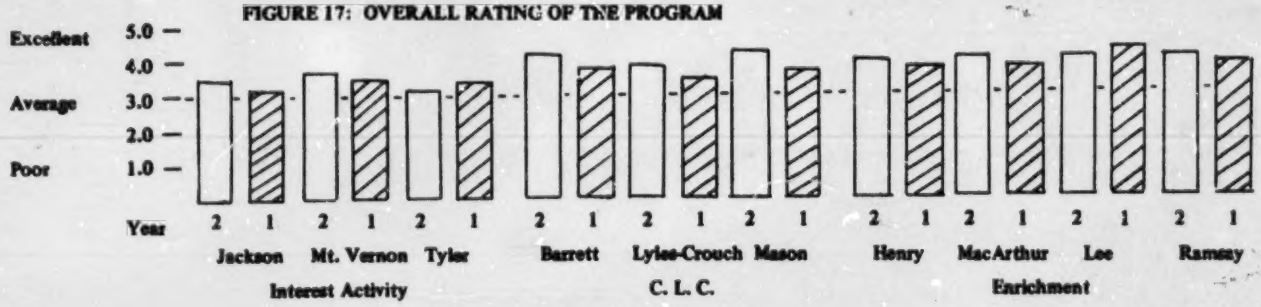


While these data show a generally high level of self-concept, there is a uniform *decline* in the interest activity schools (Jackson, Mount Vernon, and Tyler) from Year 1. The *Piers-Harris* self-image data taken from the students do not, however, corroborate these parent perceptions (in fact, they show a mild *improvement* of self-image). The parent comments, however, show some degree of concern about "reactivity" of the regular classroom teachers toward children leaving the classroom–and indicate that the children carry the effects of this to the home in the

form of worry about missed classroom work. Although the teacher study did not show this phenomenon *(c.f., Figure 17 below)*, the parent comment data indicate that some of the parents have formed this notion.

6. **Overall Rating**: Figure 17 presents a school-by-school summary of the overall ratings given to the program by the parents.

FIGURE 17: OVERALL RATING OF THE PROGRAM



In general, the parents gave the program high ratings, indicating broad support for the effort. The C.L.C. option received the highest marks, and the three schools included in this option (Barrett, Lyles-Crouch, and Mason) all increased their ratings over the previous year. The enrichment option was second in the ratings, followed closely by the interest activity subgroup. Although the teachers were less generous in their ratings *(c.f., Figure 27)*, they did agree on the same general ordering of the three program options.

SUMMARY: The survey for Year 2 revealed that parents were more informed about the *Program for the Gifted and Talented* than in Year 1. Accordingly, the other ratings–of program effect on achievement, social relations, creativity, and self-concept–closely corroborate the data observed in the student testing data. Thus, the additional information provided by the program staff has improved the parents' ability to discern the effects of the program.

Therefore, the fact that the judgements of the parents are similar to other sources of information gives great credence to their overall favorable rating of the program.

ANALYSIS OF THE TEACHER SURVEY DATA

The evaluation study was expanded during Year 2 to include a survey of the regular classroom teachers who have charge of the gifted and talented pupils when they are not participating in program activities. There were both positive and negative reasons for conducting this survey:

- The need for additional perspective on the program from skilled professional observers who were close to the pupils.
- The need to investigate charges made by some parents that the regular classroom teachers were not supportive of the program.

Accordingly, the evaluator worked with the program staff to design a survey study.

METHODOLOGY: The evaluator engaged the program staff in a discussion of the issues related to regular classroom teachers. Using the list of issues, the evaluator prepared draft instruments. These were submitted to a small number of teachers for review. These review sessions led to several modifications to the items and directions for the survey. Questionnaire packages were distributed to individual teachers by the principals in each school. The packages contained:

- A cover letter signed by Mr. Richard Hills explaining the purpose of the study.
- The questionnaire which contains its own directions.
- A post-paid return envelope.

The subject completed the questionnaire at his/her leisure. The instructions specified that the respondent was not to place her or his name on the form, thus preserving the confidentiality of response. The completed questionnaires were mailed directly to the evaluator's offices where they were scored and coded for keypunching. The data were punched by A.M.S. Computer Services, subject to 100% key verification. The analysis was performed using the SPSS package on the CDC 6400 maching at the University of Virginia Computation Center. The results of this analysis are reported below.

a. **Information Received about the Program:** Teachers were asked to rate the *amount* of information which they had received about the program from each of two sources:

- the gifted and talented teachers
- the school principal

The summary statistics for this item are presented in Figure 18.

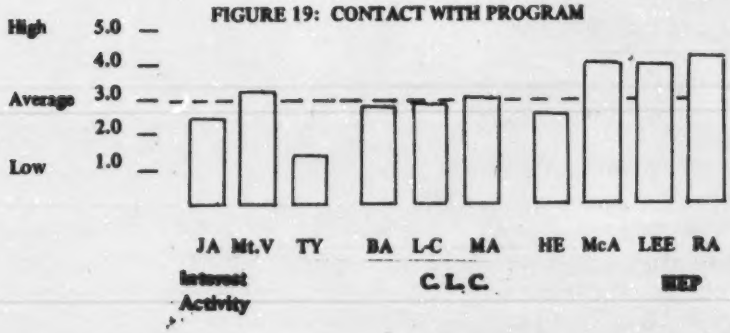
FIGURE 18: INFORMATION RECEIVED ABOUT THE PROGRAM

In general, the data show that teachers receive their information about the program from the G & T program staff with relatively little involvement on the part of the principal. The only exception was found at Charles Barrett school, where the principal seems to be quite involved.

The data show a relatively low level of information being passed between the G & T program and the regular teachers. The enrichment design was somewhat of an exception; this is due to the fact that regular information exchange is a part of this program's design.

b. **Contact with the Program:** teachers were asked to rate the extent to which they had had contact with the program during the academic year. The summary statistics for this item are shown in Figure 19.

FIGURE 19: CONTACT WITH PROGRAM

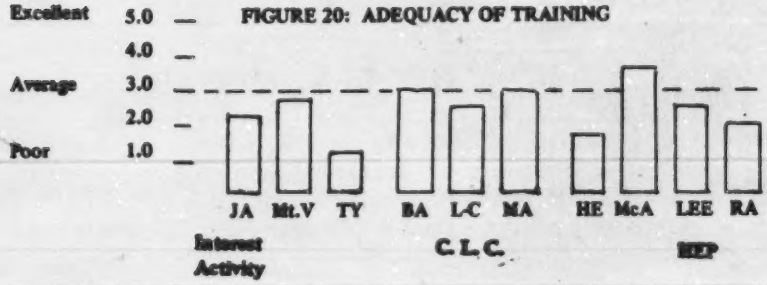


The data show a parallel to the "information" item described above; the interest activity teachers had the least contact and (predictably) the enrichment schools reported the most contact.

Contact was reported to be "average" with the exception of John Tyler school where a very low level was found. In general. the data show that the program has considerable room to grow in the area of opening contact with the teachers.

c. **Training to Work with the G & T Program:** the teachers were asked to assess the adequacy of their training to work with the G & T program. The summary statistics for this item are presented in Figure 20.

FIGURE 20: ADEQUACY OF TRAINING



With few exceptions teachers rated their training as "less than average" and in one school (Tyler) "poor." In fact, the data show a close relationship between contact, information exchange and *training*. The data indicate that the program should closely examine the process of training regular classroom teachers to work with G & T staff and pupils. There appears to be a definite need for improvement in the training process.

d. **Cross-Fertilization of Ideas**: the program for the Gifted and Talented was designed with the intent that there would be a cross-fertilization of ideas with the "regular" classrooms—leading to reflection on the instruction received by all children, resulting in improvements that would be shared by all. Accordingly, teachers were asked to rate two aspects of this process:

- The extent to which feedback had been received from the G & T program.
- The extent to which ideas, concepts or materials developed in the G & T program had been transfered to the regular classes.

Figure 21 presents the summary statistics based on the responses of teachers to each of these items; *these data should also be compared with the data in Figures 29, 30 and 34 (below).*

FIGURE 21: CROSS-FERTILIZATION OF IDEAS

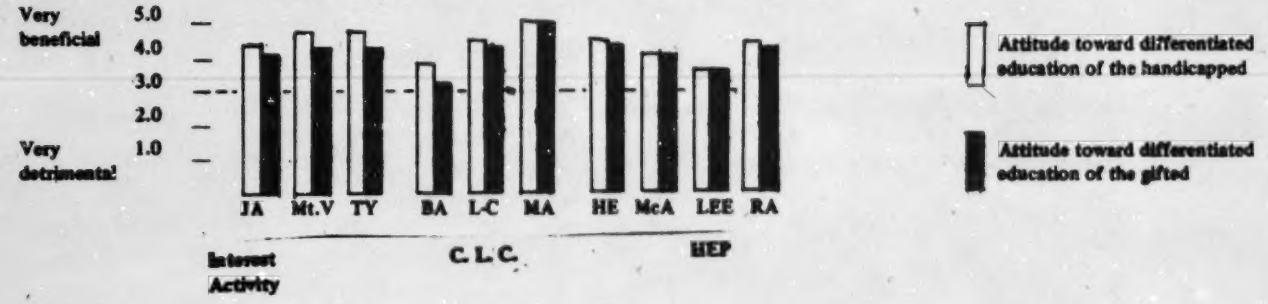
The data show that the enrichment model is the only program option which has managed to attain appreciable amounts of feedback or transfer of ideas. This result is consistent with the basic design of the enrichment option which places the regular classroom teacher in much greater contact with the G & T program staff.

The data also offer hope for increasing the impact of the cross-fertilization process: in most cases, the extent to which ideas are transferred is based on a relatively small amount of feedback—and the extent to which transfer occurs is directly related to the amount of feedback received. Thus, the program could possibly increase the amount of transfer of ideas by taking steps to increase feedback between the regular teachers and the G & T program staff.

e. **Attitudes toward Differentiated Education**: the parent data from Year 1 contained a relatively large number of complaints to the effect that the regular classroom teachers were hostile to the program. In order that these charges might be studied, the teacher survey included two items which sought to tap the respondents' views on differentiated education for both the handicapped and the gifted. The summary statistics for these questions are presented in Figure 22 (next page).

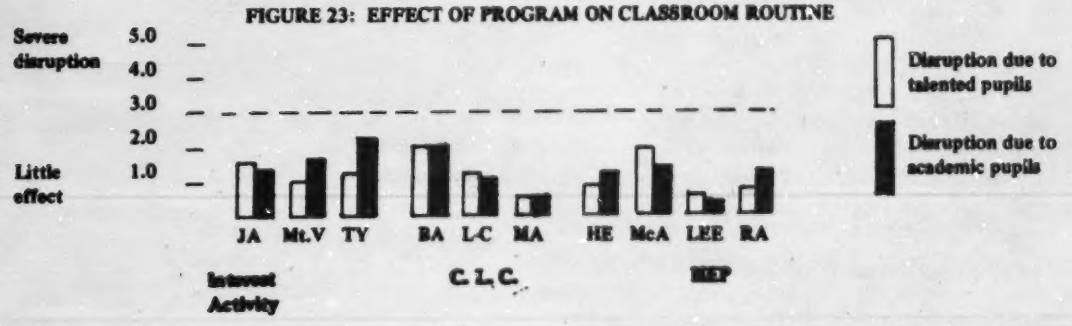
The data show that in general, the teachers expressed a positive attitude toward differentiated education. On the other hand, the data also show that the teachers are more favorable to the differentiated education of the handicapped than that of the gifted. *Although the program has little or no control over these attitudes, this information should receive due consideration in the planning of program activities or teacher training workshops.*

FIGURE 22: ATTITUDES TOWARD DIFFERENTIATED EDUCATION



f. **Effect of the Program on the Classroom Routine**: the G & T program activities may represent a potential source of disruption to the classroom routine in terms of children going to or arriving from activities. Accordingly, the survey of teachers included two items which assess the amount of disruption resulting from the activities of both academic and talented pupils. Figure 23 presents the summary statistics for these items.

FIGURE 23: EFFECT OF PROGRAM ON CLASSROOM ROUTINE



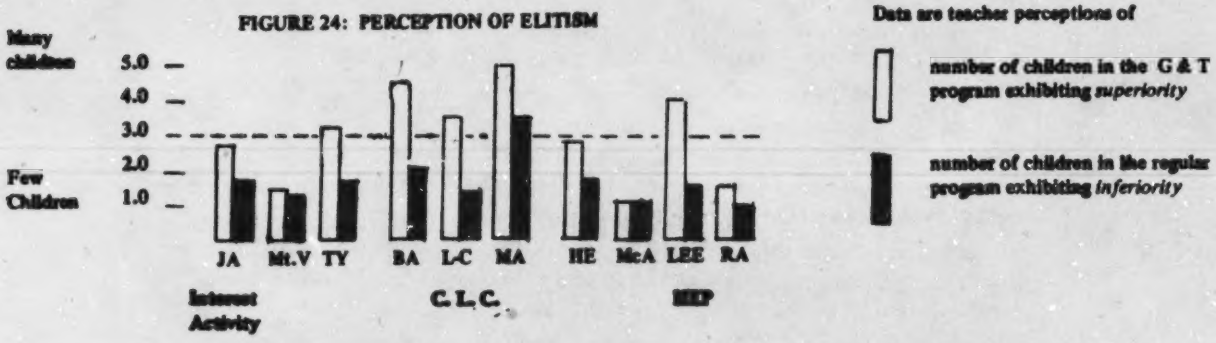
The data show relatively little disruption to the classroom routine. The interest activity schools seem to report the most disruption with the academic pupils "contributing" more than the talented. The amounts reported are very small, and this data would indicate that the teachers do not attribute disrutpion to the G & T program.

g. **Observation of Elitism**: one of the most serious concerns about the differentiated education of the gifted is the potential for the development of "elitist" attitudes in the pupils. The G & T program recognizes its role of enhancing the skills and talents of the pupils, but also is concerned that normal social development will take place in harmony with society.

- Pupils in the program should not manifest attitudes of *superiority*—rather, they should recognize that they must live in a pluralistic society which contains persons of all levels of skills.
- Pupils who are not involved with the program should not develop attitudes of *inferiority* as a result of the actions of teachers or the G & T pupils.

The survey of teachers requested information about these two consequences of "elitism"; Figure 24 shows the summary statistics for their responses.

FIGURE 24: PERCEPTION OF ELITISM



The data, unfortunately, show that the teachers feel that the G & T pupils have exhibited attitudes of "superiority." The counterpart, "inferiority," on the part of the regular pupils was not observed by the teachers to any great extent. *But there was a direct relation observed between the teachers' reports of both "superiority" and "inferiority." Mason school was reported to suffer from the problem to the greatest degree in both categories; MacArthur school had the least amount of elitism—again in both categories.*

With regard to program option, the C.L.C. had the highest incidence of both aspects of "elitism," while the IA and enrichment options were slightly lower.

These findings *do not* establish the existence of "elitism" as discussed above. The study of social relations conducted in the student testing program using the FIRO-BC instrument has established a pattern of behavior characterized by:

- low assertiveness
- high independence
- low expressed affection

In addition, Table 2 (above) shows that the C.L.C. option also shows:

- low expressed inclusion

These traits *might* be interpreted by some as evidence of "elitism."

Thus, the combination of teacher data and student testing data indicate that there is "smoke"—the question of whether there is a "fire" or (if so) it can be "put out" remains to be decided. The reader should refrain from jumping to conclusions about elitism:

- *The teacher data are based on a very brief summary questionnaire which was not designed to study the problem of "elitism" in great detail.*
- *The teachers data also show that the respondents generally have had little contact with the program (c.f., Figure 19).*
- *The student testing data patterns are not extreme—the deviations from normal performance are real, but very small.*

The data are conclusive on one point: a detailed study of "elitism"—and its existence in the program, and if so, means for eliminating it—must be conducted. Such a study should have the following components:

- A session should be held, including parents, teachers, G & T staff, administrators, and out outside experts with the purpose of building a workable definition of "elitism" in terms of both (1) observable behaviors and (2) the existing student data base. This step is necessary because the term is currently subject to multiple interpretations; this multiplicity of value perspectives must be resolved before formal scientic effort may begin.
- The existing student data base should be thoroughly studied on a case-by-case basis to determine the degree to which elitism is present. Hopefully, the consensus-building activity described above will permit the description of "elitism" in terms of a pattern of scores on the various instruments which are a part of the testing program. This step is necessary because the current program performance standards have been set in terms of group statistics rather than detailed consideration of individual patterns.
- The G & T program staff should interact more closely with the regular classroom teachers to identify and deal with cases of suspected elitism. This step will require some additional training of both program staff and regular teachers; it is, however, necessary to fully document observed cases of elitism and to open a communication channel so that the G & T program may become aware of problems as they arise.
- The parent and teacher surveys should be modified to obtain a broader range of opinion on the topic of elitism. This is necessary to provide additional broad-based perspective for the analysis of the preceding sources of information.

These four steps will enable the G & T program to analyze the phenomenon of elitism and to make the needed program modifications which may be required.

h. **Effects of the Program**: the teachers were asked to rate the effects of the program in the areas for which performance standards had been set in the student testing program: academic achievement, creativity, social relations, and self-concept. The teacher questionnaire used the same format that was used on the parent survey form. Thus, it is possible to compare the ratings given by both groups. The summary statistics for each of the four comparisons are shown in Figures 25 through 29 (see next page).

The data show very clearly that the teachers are less enthusiastic about the effects of the program than the parents. (The sole exception being Lee school where teachers consistently give the program higher ratings than the parents.)

Although the teacher ratings are generally lower than the parents', the two are related; the data suggest that the teachers may be using a much broader subjective range than the parents—what may appear to be "average" to the parent may seem to be substantially "below average" to the teacher.

The teachers gave their highest ratings to the enrichment option. However, the data on information and contact with the program (c.f., Figures 18 and 19) show that teachers in the enrichment program had indicated that they had received the most information about the program.

The teacher ratings are not corroborated by the student testing data or the comparison group study reported below, both of which considerable progress which not consistent with the teacher reports of "below average" performance.

SPECIAL STUDIES: In addition to the general questions dealing with the overall, program-wide evaluation concerns, the teacher survey contained *specific items* aimed at evaluation of the three individual program options. The results of these special studies are derived only from teachers in the schools where the three program options are located.

INTEREREST ACTIVITY: The teachers at Jackson, Mount Vernon and Tyler schools were asked to evaluate three aspects of the programs.

FIGURE 25: EFFECT OF PROGRAM ON SELF-CONCEPT

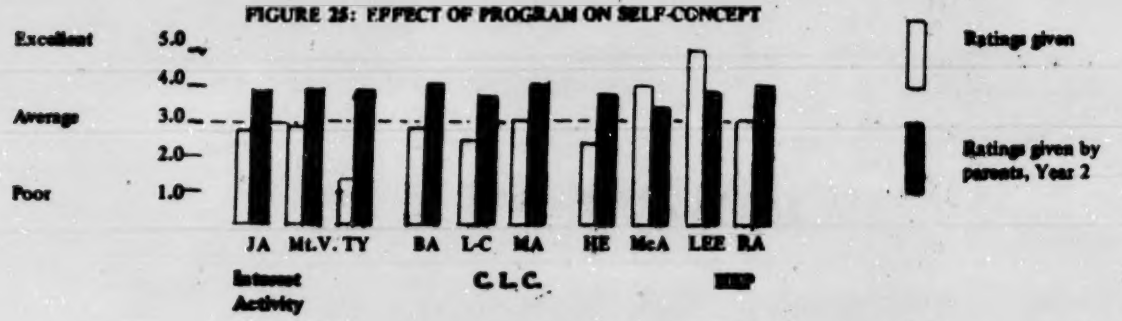


FIGURE 26: EFFECT OF PROGRAM ON SOCIAL RELATIONS

FIGURE 27: EFFECT OF PROGRAM ON ACADEMIC ACHIEVEMENT

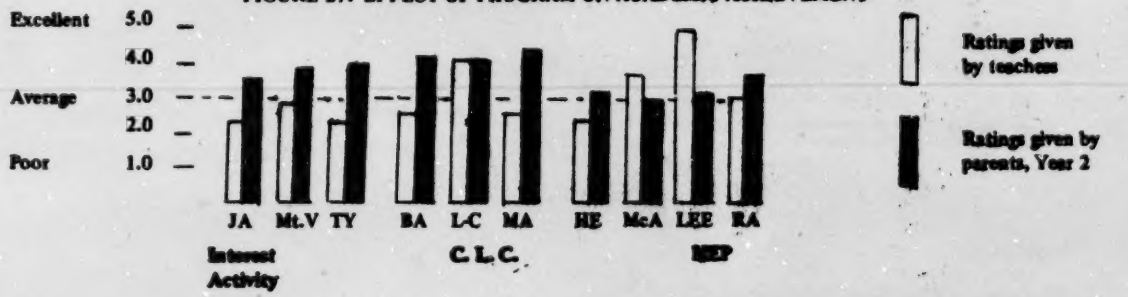


FIGURE 28: EFFECT OF PROGRAM ON CREATIVITY

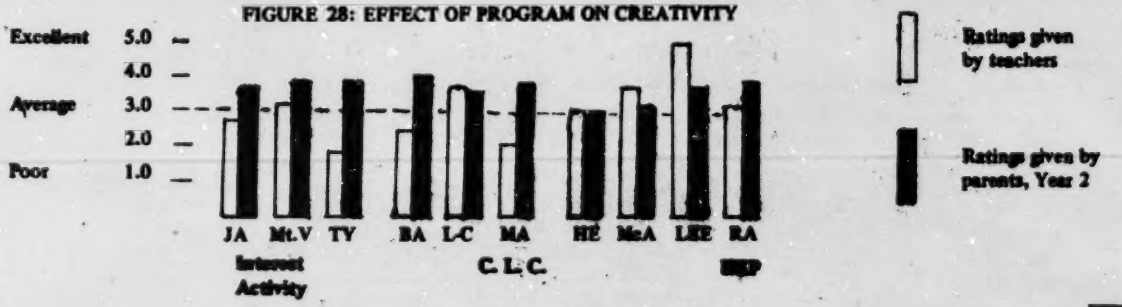
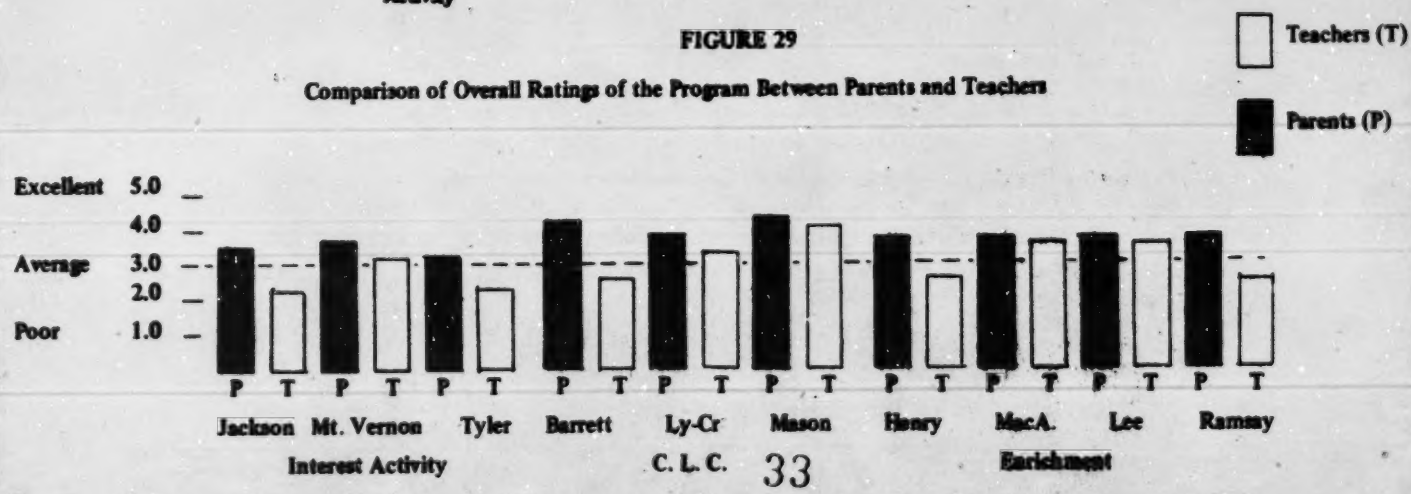


FIGURE 29

Comparison of Overall Ratings of the Program Between Parents and Teachers



a. **Participation of the Interest Activity Teacher in the Process of Pupil Evaluation:** during Year 1, several complaints were voiced by parents to the effect that their children spent a large amount of time in IA activities but received very little credit for their work in terms of grades. Several parents, in fact, expressed concern that their child's overall grades had worsened as a result of the time-demands of the IA work.

Accordingly, one item in the teacher survey was designed to determine the role of the IA teacher in the process of pupil evaluation. Table 6 presents the results obtained from this item.

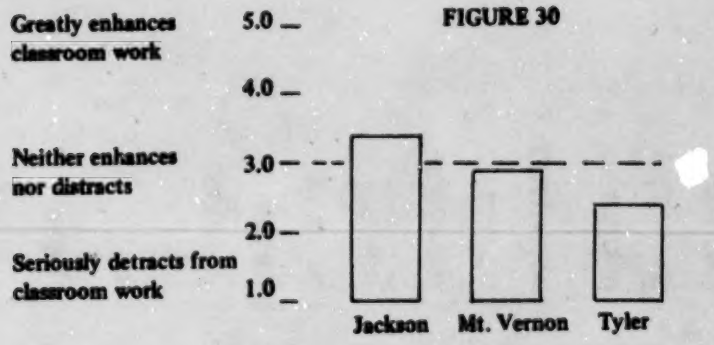
TABLE 6: PARTICIPATION OF THE IA TEACHER IN THE EVALUATION OF PUPIL PROGRESS

	Jackson	Mt. Vernon	Tyler
IA teacher makes suggestions for pupil evaluation	9	6	7
Case-by-case joint review of pupil evalsation	2	1	1
IA teacher is responsible for evaluation of pupils	1	1	0
Other	3	3	1

The results show that the role of the IA teacher lies primarily in the provision of suggestions for evaluation to the regular teacher that they engage in a case-by-case review of each pupil with the IA teacher.

b. **Enhancement of Classroom Activity:** the program design intends that the products of the interest activities should enhance the work in the regular classroom. Accordinly, teachers were asked to assess the extent to which this had occurred. Figure 30 presents the summary statistics for this item.

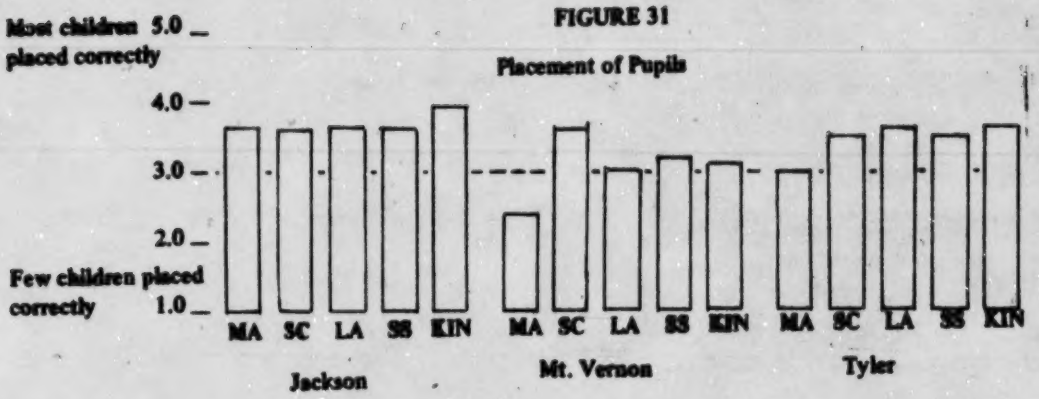
FIGURE 30



The data show that the IA activities *neither enhance nor distract from the regular classroom work.*

c. **Placement of Pupils:** the program is generally concerned about the selection criteria, particularly the placement of pupils in the various interest activities of math (MA), science (SC), language arts (LA), social studies (SS) and kinesthetics (KIN). Accordingly, teachers were asked to provide their perception of the extent to which pupils had been properly placed. Figure 31 provides the summary statistics for this item.

FIGURE 31



The data show basic overall agreement with the placement of pupils--although the agreement is far from unanimous. In one instance, the teachers at Mount Vernon school took serious exception with the placement of children in the mathematics activities.

CURRICULUM LEARNING CENTER (C.L.C.): The teachers at Barrett, Lyles-Crouch and Mason schools were asked to evaluate three aspects of the program.

a. **Evaluation of Pupils:** the C.L.C. design places responsibility for the evaluation of pupil progress in the hands of the C.L.C. teacher; this causes a potential for reactivity or perceived threat on the part of the regular classroom teacher. Thus, the special section of the teacher survey requested the subject to indicate whether the C.L.C. grading arrangement had caused any problems and, if so, to describe their nature. Table 7 presents the quantitative results from this item.

TABLE 7: PROBLEMS RESULTING FROM C.L.C. TEACHER ASSIGNING GRADES

	Barrett	Lyles-Crouch	Mason
Problems encountered	1	3	1
No problems encountered	5	7	4

A small but substantial number of problems were identified. The respondent at Barrett school felt that he/she did all the work in grading and that the C.L.C. teacher merely distributed them. The respondents at Lyles-Crouch offered two separate comments.

- It is hard to agree on the grades to be given to the pupils.
- The children can't be convinced that the regular classroom work is important.

The respondent at George Mason school declined to comment on the nature of the problem that he/she had encountered.

These reports suggest that some action be taken to further clarify the role of the C.L.C. teacher in the evaluation of pupil progress.

b. **Enhancement of Classroom Work:** the program design intends that the work done in the C.L.C. classes should permeate the regular classroom, enhancing the instruction which takes place there. Accordingly, teachers in the C.L.C. schools were asked to rate the extent to which this enhancement had taken place. Figure 32 presents the summary statistics for this question.

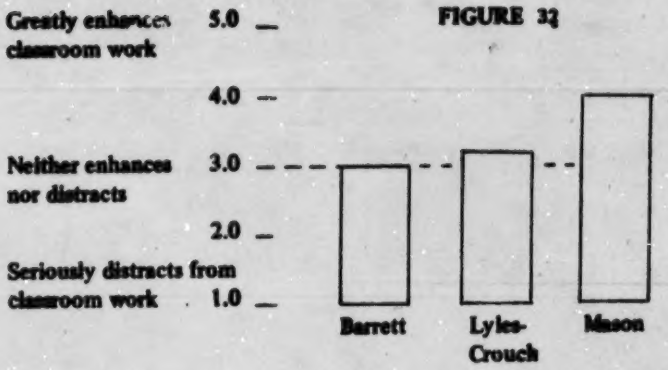


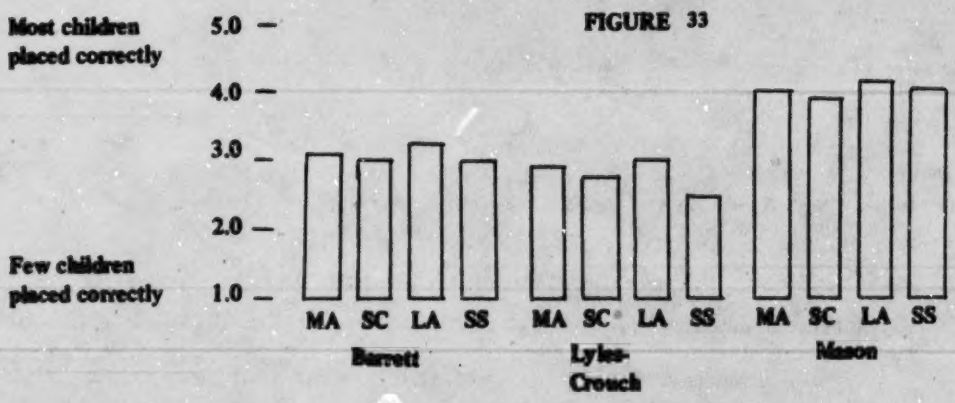
FIGURE 32

The data indicate that in general the C.L.C. activities neither enhance nor detract from the regular classroom work–although some enhancement had taken place at George Mason School. However, the C.L.C. does lead to more enhancement than the interest activity (c.f., Figure 30).

c. **Placement of Pupils**: the program is concerned about the placement of pupils into the four C.L.C. classes: math (MA), science (SC), language arts (LA), and social studies (SS). The regular classroom teachers were asked to provide their perception of the extent to which pupils had been properly placed. Figure 33 provides the summary statistics for this item.

PLACEMENT OF PUPILS

FIGURE 33



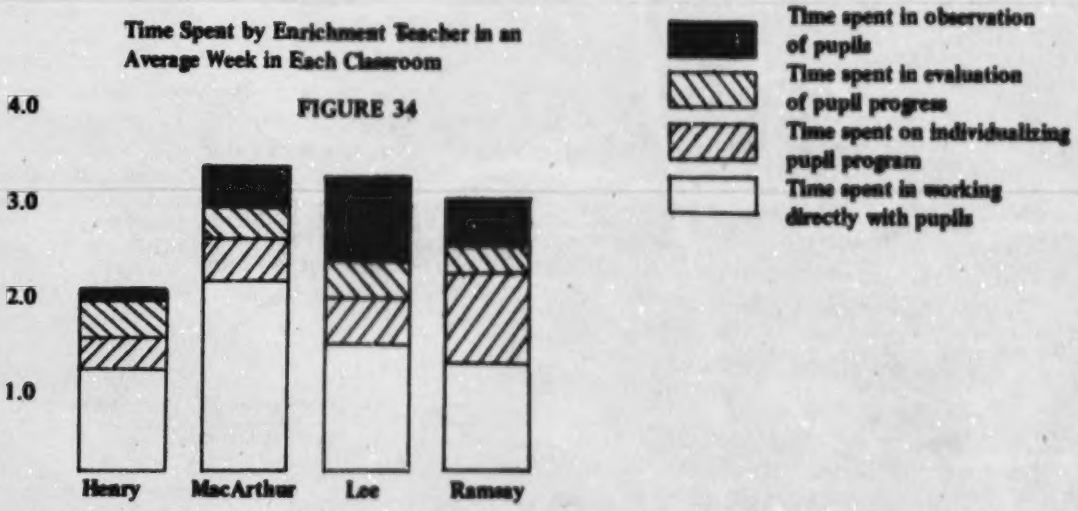
The data show some concern over the placement of pupils at Barrett and Lyles-Crouch schools; on the other hand, teachers at Mason school seemed to be quite satisfied with pupil placement.

ENRICHMENT ACTIVITY: The teachers at Henry, MacArthur, Lee and Ramsay schools were asked to provide data in two areas.

a. **Time Spent by the Helping Enrichment Person (HEP) in Program Activities:** the enrichment design provides a teacher (HEP) to work with the regular teacher and gifted pupil to enrich the child's regular classroom situation. The teachers were asked to estimate the amount of time that the HEP spent in an "average" week in the following program activities:

- working directly with pupils
- individualization of pupil programs
- evaluation of pupil progress
- observation of pupils

Figure 34 presents a composite picture of the distribution of HEP time over the various activities as reported by the classroom teachers.



The data show a striking disparity between the data from Patrick Henry school and the remaining enrichment schools. Whether these are due to the perceptions of the teachers or neglect of Henry school should be determined by the project management.

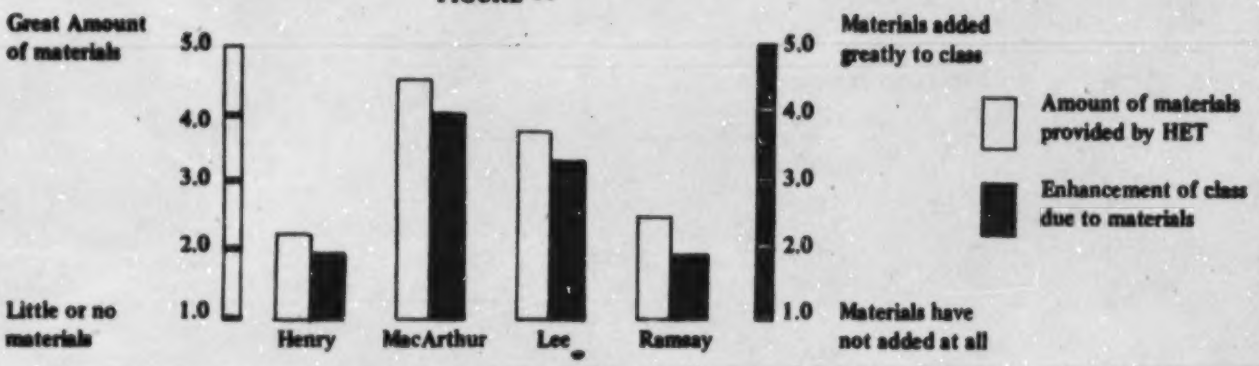
The data do confirm the expectation of the enrichment design: the HEP spends the bulk of her/his time in working with pupils and in individualizing the program.

b. **Enrichment of the Classroom:** the enrichment design aims to enrich the regular classroom by a more direct route than the IA or C.L.C. options; the HEP is supposed to provide materials and suggestions which will contribute directly to the individual pupil—and hopefully, these materials and suggestions will come to enhance the regular class as well. Accordingly, the regular classroom teachers were asked to assess the extent to which:

- The HEP had provided such materials and suggestions.
- The extent to which they had enhanced the classroom environment.

Figure 35 presents the summary statistics for these items.

FIGURE 35



The data show considerable variation in the amount of materials and suggestions that respondents felt that they had received. The teachers at Patrick Henry and Ramsay schools felt that they had received little, while those at MacArthur and Lee schools were quite satisfied.

There is also a direct relationship between the amount of materials received and the enhancement of the regular classroom work. This is evidence that the HEP used good judgment in the providing of materials--and that the teachers used almost everything they received.

The program should seek to find ways of improving the dissemination of materials to the regular classroom teachers--particularly at Henry and Ramsay schools.

SUMMARY OF THE TEACHER SURVEY

A survey questionnaire was distributed to all regular classroom teachers in schools which had components in the *Program for the Gifted and Talented.* The instrument touched general topics as well as those related to the specific program option with which the teacher worked.

The data showed that the teachers had received relatively low amounts of information about the program and had experienced only limited contact with it. Teachers reported that their training to work with the program was "less than average." A direct relationship was found between perception of training adequacy and the degree of contact and information interchange; this indicates that training activities would be a successful vehicle for bringing about an increased exchange of ideas between G & T program staff and the regular classroom teachers.

The survey also investigated program effects on the classroom routine. The teachers reported very little disruption to their classes as a result of the G & T pupils leaving and/or arriving from program activities.

Elitism, however, presented a more serious problem. The teachers--particularly those in the C.L.C. option--reported a substantial amount of elitism which took the form of the G & T pupils exhibiting attitudes of superiority. The current teacher data, however, are flawed by a self-reported lack of contact with and information about the program. On the other hand patterns in the FIRO-BC data indicate that behaviors which could be interpreted as "elitism" might be in the process of forming. *The combination of the teacher and FIRO-BC results indicate that during Year 3, the program should conduct a closer investigation of this phenomenon.*

The teachers were not at all enthusiastic about the effects of the program in the areas of academic achievement, creativity, social relations and self-concept. Their perceptions were *not* corroborated by the student testing data or the survey of parents. The data did, however, indicate that teachers were using a much broader subjective scale in their rating process than the parents--or the expectations of the program's performance standards. *The recommended increases in information dissemination activities will communicate the program to the teachers, and bring their expectations for gifted and talented pupils into correspondence with those of the program and of the limitations on*

growth and achievement in children–even gifted ones–in the 8 to 12 age range.

Special studies were conducted in each of the three major program options: Interest Activity (IA), Curriculum Learning Center (C.L.C.) and Enrichment.

One special study investigated the role of the special IA teacher in the evaluation of pupil progress; the results showed that the role is primarily an advisory one. A similar analysis of evaluation in the C.L.C., showed that the regular classroom teachers had few problems with sharing grading responsibilities with G & T program staff. These data indicate that a wide variety of options in the evaluation of pupil progress may be considered by the G & T program.

In another special study, the enhancement of classroom activities as a result of G & T activities was investigated. The results showed that the program neither enhanced *nor* detracted from the regular classroom; however, a detailed analysis of contact with the program in the enrichment group showed that the enhancement of regular classes was a direct function of information and materials exchanged with the G & T program.

Finally, special studies within the IA and C.L.C. options showed that the regular classroom teachers agreed–with some reservations–with the G & T program's placement in special activities such as math, science, language arts and social studies.

In sum, the teacher survey provided a valuable source of information. The data point toward the need for a thorough study of potential "elitism" and for more contact and exchange of ideas between the G & T program and the regular classroom teachers.

ANALYSIS OF THE COMPARISON GROUP DATA

The evaluation design for the *Program for the Gifted and Talented* recognizes the need for a reference group with which to compare the changes and impact of the G & T activities. Unfortunately, the high cost and time-burden of the student testing program places a severe constraint upon any extension of data collection to groups outside the G & T program.

The evaluation study sought to devise a plan which would provide limited comparisons between the G & T pupils and others—within the rather limited resources available.

This section describes the methodology used in the comparison study and its results.

METHODOLOGY: This study is built around the state and local use of the SRA achievement series in the spring and fall of each year. This provides a series of points in time in which all pupils will have comparable data. (Since testing takes place in alternate years, the comparison study could not have been conducted in Year 1.) The study focuses on two *cohorts:*

- **cohort one**: pupils who were in the fourth grade in academic year 1974-1975 and in fifth grade in AY 1975-1976.
- **cohort two**: pupils who were in the fifth grade in AY 1974-1975 and in sixth grade in AY 1975-1976.

A tenth-count systemic sample* of all pupils was drawn from each of the 10 schools serving as sites in the G & T program. This sample was further cross-classified into five groups:

- *General Population Sample (GPS):* those pupils who neither participate in the G & T program nor ever entered the gross screening process.
- *Gross Screening Only (GSO):* those pupils who entered the gross screening process but who were rejected.
- *Talented:* those pupils who are participating only in the art, vocal music or instrumental music activities of the G & T program.
- *Academic:* those pupils who are participating only in the IA, C.L.C., or enrichment options.
- *Both:* those persons who are participating in both academic and talented activities in the G & T program.

The SRA achievement data were obtained for each of these five groups as follows:

cohort one: March 1974 and March 1975 testing

cohort two: Fall 1973 and Fall 1975 testing.

The data were transferred to coding forms and keypunched at A.M.S. Computer Services. The data were analyzed using the SPSS package on the CDC 6400 machine at the University of Virginia Computation Center.

RESULTS: The data support two basic lines of analysis. First, an *incidence* study was conducted, analyzing distribution of pupils be ethnic background, sex and income level across the five groups. Second, an analysis of *changes* in the SRA achievement scores was performed, studying growth in achievement in each of the five groups

a. **Incidence Studies**

(1) *Ethnic Background:* the program design and selection criteria have been designed to seek seek full participation by persons from all ethnic backgrounds. Individuals in all five groups were cross-classified by ethnic background. The results of this analysis are shown in Table 8.(see next page). These data show that the gross screening process is not biased: whites, blacks and others seem to be rejected at this point in numbers roughly equal to their proportions in the general population. Further, entry to the talented option is also mirror of the general population. Participation in the academic option, however, deviates somewhat from the general population: whites participate in slightly higher proportions while blacks participate in lower proportions. However, the differences in proportions fail to reach significance as measured by a chi-square test of contingency.

*Every tenth pupil's achievement testing data were extracted from the Alexandria school system's data bank..

TABLE 8: DISTRIBUTION OF PUPILS IN THE COMPARISON GROUP BY ETHNIC BACKGROUND AND ANALYSIS GROUP. PERCENTAGES ARE GIVEN IN PARENTHESES.

	White	Black	Other*
Both academic and talented	4 (80)	1 (20)	0 (0)
Academic only	29 (68)	14 (32)	0 (0)
Talented only	23 (54)	18 (42)	2 (04)
Gross screening only	11 (50)	9 (48)	2 (02)
General population	43 (54)	32 (40)	5 (06)

*Includes Hispanic and Oriental

The overall data support the hypothesis that there is no discrimination with respect to ethnic background in selection into the program or placement in either of the options.

(2) *Sex:* the program is committed to the full participation of gifted pupils without regard to sex. The study this, individuals in all five groups were cross-classified by sex; the results of this analysis are shown in Table 9, below.

TABLE 9: DISTRIBUTION OF PUPILS IN THE COMPARISON GROUP BY SEX AND ANALYSIS GROUP. PERCENTAGES ARE GIVEN IN PARENTHESES.

	Male	Female
Both academic and talented	1 (.20)	4 (.80)
Academic only	23 (.54)	20 (.46)
Talented only	15 (.35)	28 (.65)
Gross screening only	11 (.50)	11 (.50)
General population	42 (.53)	38 (.47)

The data indicate that sex is not a biasing factor in admission: both males and females are rejected in equal proportions in the gross screening process.

The academic program reflects the general balance between males and females in the general population. On the other ahnd, the females comprise 65 percent of the talented pupils. A chi-square test of contingency revealed that the distribution of females observed in the talented group did not reflect the general population distribution.

Whether this reflects a population trend among the talented or a defect in the selection procedure remains to be determined–although it should receive some attention.

(3) *Family Income:* the archival data included the pupil's *School Lunch Subsidy Code,* which is a rough indicator of family income. For the purposes of this study, families of pupils receiving subsidies may be considered as a "low income" group; similarly, the families of pupils not receiving subsidies may be considered as a "higher income" group. The design intends that selection for, and participation in the gifted and talented activities should not be affected by the pupil's income status. This aspect was studied by cross-classification of pupils by family income as defined above; Table 10 presents the results of this analysis.

TABLE 10: DISTRIBUTION OF PUPILS IN THE COMPARISON GROUP BY FAMILY INCOME (PERCEIVED FROM SCHOOL LUNCH SUBSIDY) AND ANALYSIS GROUP. PERCENTAGES ARE SHOWN IN PARENTHESES.

	Lower Income	Higher Income
Both academic and talented	0 (0)	5 (100)
Academic only	7 (.16)	36 (.84)
Talented only	12 (.28)	31 (.72)
Gross screening only	8 (.36)	14 (.64)
General population	23 (.29)	57 (.71)

The data show that the proportion of persons in the various G & T program activities roughly mirrors the distribution in the general population. The "academic only" showed a tendency toward greater participation by higher income pupils; however, a chi-square test of contingency failed to show significant differences between this group and the general population.

Thus, the data support the hypothesis that the G & T program is relatively "blind" to family income in its selection and assignment procedures.

b. **Analysis of SRA Data**: The SRA Achievement Series data was analyzed for each of the five groups. Figure 36 presents the summary statistics resulting from this analysis (see next page).

The data show that the selection criteria of the program are quite appropriate: the academic group pre-tests are significantly higher than those of either the "gross screening" or "general population" groups. Further, the gross screening group was not significantly different from the general population on pretest. Thus, at the time of selection, the program made wise choices—as far as academic achievement was concerned.

The growth data confirm the efficacy of the program. All academic groups showed relatively high progress: on the composite measure, the academic group advanced from approximately seventh to tenth grade levels. The "gross screening only" group showed a high rate of growth—but the post test scores of this group were not significantly different from the pretest data of the academic groups.

The data indicate that the groups had their highest scores and their greatest growth in the area of language arts. Reading and mathematics were slightly lower although the mean scores are between eighth and ninth grade levels.

Thus, the comparison analysis shows great progress in the area of academic achievement by the Gifted and Talented Program.

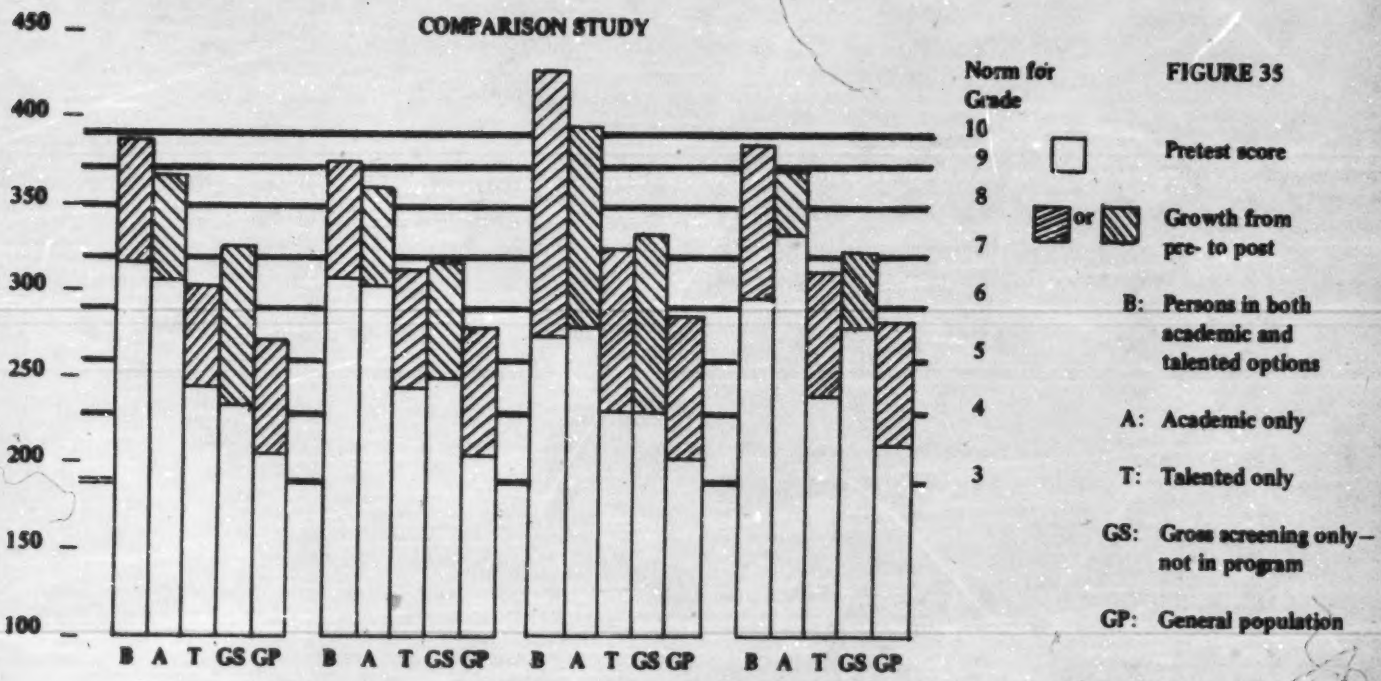


FIGURE 35

SUMMARY FOR THE COMPARISON STUDY

A statistical comparison group was constructed by means of random sampling from the Alexandria system data files. The study investigated the changes in achievement over a two year period using the and loca spring testing with the SRA achievement series in the fall and spring. A second portion of the study investigated the makeup of the program with respect to ethnic background, sex and family income.

The data showed that the academic achievement of the G & T pupils surpassed that of the general population by great amounts: G & T pupils—although actually in grades 5 and 6 began the project with seventh grade skills and progressed to tenth grade levels.

The program's makeup was generally found to be free of discrimination of bias with respect to sex, ethnic background or family income.

CONCLUSIONS AND IMPLICATIONS

The results from the analyses described in Section Two support the following conclusions and implications for the Alexandria program for the Gifted and Talented.

I. The program is performing well beyond the stated standards in academic achievement and creativity. Further parent ratings confirm the impact of the program in these areas.

II. The student testing data and the teacher data imply that "elitism" in the form of G & T program pupils exhibiting attitudes of "superiority" may be in a nascent state. The data, however, are far from conclusive, but do require careful inquiry during Year 3.

III. The students were found to have generally healthy, normal self-concept which changed very little over the academic year, in accordance with the program design.

IV. The students were found to have a positive attitude toward learning; however, scores in this area have decreased significantly over the year. The program should investigate the causes of this decline (centered in the C.L.C.) and take steps to remedy it.

V. In overall comparison with the performance standards, the C.L.C. option had the best record, followed by IA and enrichment. The performance data indicate that the program is making great progress toward meeting its performance objectives. Further, the creativity data show that the three program options may result in the differential development of the pupils' approach to problems.

VI. Parents reported substantial increases in the amount of information which they had received about the program–implying that program efforts at information dissemination were quite successful. Further, for Year 1, parent ratings bore no resemblance to the testing results; this was not the case in Year 2 where parent ratings closely coincided with the student test data. This is taken to indicate that the informational activities have substantially improved parents' abilities to observe the progress of their children.

VII. Teachers reported a relatively low degree of contact with the program and felt that they had received little information about its activities. A direct relationship was found between perception of training adequacy and the degree of information interchange; this indicates that training activities would be a successful vehicle for bringing about an increased exchange of ideas between G & T program staff and regular classroom teachers.

VIII. The teachers were not enthusiastic about the effects of the program. Their ratings, however, were in direct contradiction to the parent and student data. The survey results indicated that teachers had broad expectations for the program; if information dissemination activities were to be mounted these broad expectations might be brought into line with those of the program and parents.

IX. The comparison study showed that the program was generally free of discrimination with respect to sex, ethnic background or family income.

X. The comparison study gave specific support to the program's selection criteria in the area of academic achievement. Pupils began, on the average, with seventh grade skills and progressed to tenth grade levels in a period of two years.

These results indicate that the project exhibited exemplary performance in Year 2, and merits further development and elaboration.

APPENDIX A

DESCRIPTION OF THE INSTRUMENTS USED IN THE STUDY

MEASUREMENT STRATEGY

The evaluator worked with program staff to identify a battery of instruments which would respond to the concerns expressed. On the basis of this work, six instruments were recommended. These are described as follows:

A. *Self-Concept: The Piers-Harris Children's Self-Concept Scale*[1] was selected as an appropriate measure of self-concept. It is a quickly completed (15-20 minutes) self report instrument designed for children over a wide age range. Administered in group form, it requires approximately a third-grade reading knowledge. It can be administered and scored by responsible, educated non-psychologists, but should be interpreted only with the aid of someone knowledgeable in measurement and statistics, psychology of adjustment, and self theory. The scale was designed primarily for research on the development of children's self attitudes and correlates of these attitudes. Scores range from 0 to 80. The Piers-Harris scale has been subjected to numerous validation studies and has been used in more than 100 research studies.

B. *Social Concept: The Fundamental Interpersonal Relation Orientation*[2] inventory for behaviors of children (FIRO-BC) was selected as an appropriate measure of social concept and its related subtopics: it provies a framework for describing general interactions between individuals; this framework involves three constructs:

TABLE 1
EXPLANATION OF FIRO-BC SUBSCALES

	Expressed Behaviors	Notation	Wanted Behaviors	Notation
I. INCLUSION	Hi: S acts to include others in activities Lo: S acts to exclude others in activities	I^e	Hi: S wants to be included in activities Lo: S wants to be left alone	I^w
C. CONTROL	Hi: S acts to determine the behavior of others Lo: S does not act to determine the behavior of others	C^e	Hi: S wants others to determine his behavior* Lo: S does not want others to determine his behavior	C^w
A. AFFECTION	Hi: S acts to show positive sentiments to others Lo: S acts to show absence of positive sentiments to others	A^e	Hi: S wants others to show positive sentiments to him* Lo: S is indifferent to positive sentiments shown to him by others	A^w

*The "wanted control dimension is counterintuitive to some. *Hi* C^w implies *dependence*, *Lo* C^w implies *independence*. The classical authoritarian personality would be Hi on both C^e and C^w. The A^w subscale also requires some explication. A high score on A^w indicates that the subject wants others to show positive sentiments to him; the person with high A^w *values* affection and cannot be said to *need* affection.

- Inclusion: Degree of participation in activities
- Control: Degree of determination of forces affecting one's life, and
- Affect: Amount and nature of emotional content of the relationship.

1. Authored by E. V. Piers and D. V. Harris, it is published in Counselor Recordings and Tests, Nashville, Tenn.
2. W. C. Shutz, *FIRO: A Three-Dimensional Theory of Interpersonal Behavior*, (New York: Holt, Rinehart, 1958).

The FIRO-BC instrument samples the current state of the individual in terms of:

- Degree to which the construct is *expressed* by the individual.
- Degree to which the construct is *wanted* by the individual.

The scale yields six scores which may be represented as shown in Table 1. The instrument produces a numberical rating for each of the six subscales: scores range from 0 to 9. The FIRO-BC was validated on a sample of 200 fourth, fifth and sixth graders in New York City.

C. *Attitude Toward Learning:* No acceptable published instrument could be found which was suitable for this population and thus "About Me" (a brief checklist that assesses student attitudes toward learning) was designed to be used in the project.

The instrument contains (a) directions, (b) solicitation for demographic information and (c) 10 questions which assess the student's attitude toward learning. The instrument is to be group administered and key-scored, yielding a total score that is an index to attitude towards learning (high score is associated with positive attitude toward learning).

The items were selected from a factorial study of attitudes of 200 gifted children reported by M. J. Wittek in an article in the Winter 1973 issue of the *Gifted Child Quarterly*. The "like me"–"not like me" response format has been extensively used by Dr. Stanley Coopersmith. The applicability of this format to the 4th through 6th grade population is described in Dr. Coopersmith's book *The Antecedents of Self-Esteem* (W. H. Freeman Company, 1968). Although reading is not generally a problem with gifted populations, both the directions and the items are keyed to the general population.

The reliability and validity of the instrument were assessed in a small study using pupils enrolled in Saturday sessions conducted under the auspices of the School of Education of the University of Virginia. In addition, the instrument was subjected to a "check test" on representative groups of children from the gifted program and regular classes in the Alexandria schools. The instrument was found to have a high degree of internal consistency and was easily administrable to students in either class. The instrument yields scores which range from 0 to 10.

D. *Achievement:* The SRA achievement series was selected for this area of the study. The fact that the SRA battery was used in the fall statewide testing program was influential in the decision leading to its selection; this was not, however, the determining factor: the content of the tests at all levels has been carefully planned, and the test questions have been written with obvious expertise. The tests give slower students in the lower grades for which they are intended some opportunity for success and at the same time they challenge faster learners in the higher grades. Some overlapping of questions from level to level gives continuity to the series and offers special advantages in comparing results when different levels are administered in the same classroom. Comparability of the two forms, both in content and in difficulty, has been achieved to a greater than usual degree. There is no indication that the tests are unusually speeded.

The battery is composed of five subscales described below:

1. *Reading.* At all levels the reading tests yield comprehension and vocabulary scores, plus a total score. The reading selections are drawn largely from fiction, biography, science, and social studies; in each of the tests at the highest level in the multilevel edition, there is an excellent selection from American poetry. At all levels the selections are interesting and lievely, and appear to be of appropriate difficulty in sentence length, sentence complexity, and concept load.

2. *Arithmetic.* The arithmetic tests give subscores in reasoning concepts, and computation, plus a total score. The reasoning questions, built around situations presented in story form, require students to identify the facts relevant to a solution, select the arithmetical process to be used, and do the computation necessary to arrive at the solution. The questions on concepts canvass the student's ability to recognize number symbols, understand the cardinal and ordinal use of numbers, and handle time, money, and measures.

The situational approach in the reasoning subtests, while it no doubt adds an element of interest, does result in some interlocking of questions. Except for the computation subtests for the lowest level in the multilevel edition, for which chance scores give grade equivalent scores well into the lowest grade, the difficulty ranges of the various

levels appear to be appropriate. The large number of questions contributing to each subscore cover quite adequately the traditional mathematics program.

3. *Language Arts.* At all levels, the punctuation, capitalization, and usage questions are presented in a series of stories and personal letters natural to the life of students at those levels. The coverage is quite complete. The questions range from the very obvious to the more exacting points in punctuation, and from a choice between illiterate and literate English to some niceties of language usage to challenge the high scorers.

4. *Science.* These tests are designed to measure "knowledge and understanding of certain representative facts and principles of science." The questions are, however, primarily factual. It is regrettable that, with interpretation, application, and discovery being stressted in the new science curricula, so few diagrams have been included and no attempt has been made to test ability to interpret reading selections, charts, and graphs, or to apply the principles of science to both familiar and unfamiliar situations.

5. *Social Studies.* These tests are designed to measure "understanding and application of representative principles drawn from geography, history, government and economics." The questions primarily measure recall of factual information rather than understanding and application of principles. The questions are, however, extremely well written and edited.

Scores for each subtest are reported on Growth Scales which have been developed for each of the subject matter areas shared by the SRA achievement series and the Iowa Tests of Educational Development to provide a way of expressing test results in the same units from the first through the twelft grade. Although labeled "preliminary," the scales as presented can be used with considerable confidence in studying and predicting student growth.

The Technical Report gives clear and concise accounts of the development of the series and its standardization, and reports impressive test characteristics which show the tests to be generally of appropriate difficulty and length and the two forms of each test to be highly comparable.

E. *Creativity:* This is one of the most complex constructs developed by modern psychology. Current research has produced only one instrument which has a sufficient developmental background to merit inclusion in this study. This is the Torrance Test of Creative Thinking (TTCT). It was designed to measure four aspects of "creative thinking"—fluency, flexibility, originality, and elaboration. Two scores for each aspect are provided—verbal and figural (although norms are not provided for the verbal elaboration scores). The author and publisher recommend that the TTCT be used in research studies of cognitive functioning, individualized instruction, remedial programs, and new educational programs, but also suggest its use for assessing individual students' potentials.

Three figural tests can be given in 30 minutes of testing time, with additional time required for instructions. Seven verbal tasks require 45 minutes of testing time. Since the subjects give free responses to semistructured tasks, the test must be scored by hand. The guides for scoring are quite clear, and the manual discusses scoring errors to avoid.

A scorer requires some training and experience with the instrument. The reported correlations between scores of inexperienced and experienced scorers are generally in the high 90's, ranging from .66 to .99. However, the inter-scorer agreement among inexperienced scores (such as some schoolteachers) will probably be lower. The manual and scoring guide do not provide estimates of the time needed to score each test, but it appears that scoring a test would take a considerable time, even for an experienced scorer. (A scoring service is available through the publisher.)

Although the reliability studies of the TTCT are well summarized in the manual, many of the studies used only one or a few scales. These studies are not fully reported, so it is difficult to assess them in some cases. However, the diversity of studies and samples suggests that the scales have adequate reliability.

The manual summarizes more than 50 studies of the validity of the test. The majority of the studies concerned with construct validity are studies of the personalities of high and low scorers. Many of these studies utilize extreme groups without any information about students in the middle; others used designs that compare "creatives" with an "unselected" sample. In spite of these weak designs and many results that show only slight relations, the studies do suggest that the test does measure behaviors consistent with the literature on creative behavior.

Means and standard deviations are provided for a number of samples, most somewhat restricted. The basic groups used for the two main score conversion tables are 118 fifth graders in St. Croix, Wisconsin, and 108 seventh graders. (These identifications are tentative, because the manual is not as clear as it might be about these groups.) No other conversion tables are provided, and the scores are converted into T scores, but not to centile ranks or other scales. Of course, one could construct his own conversion tables from the means and standard deviations of other groups, as the manual suggests. The means and standard deviations for the groups used for the conversion tables sometimes vary considerably from the means and standard deviations reported in the manual for other fifth and seventh grade groups. For example, on one scale the mean of the fifth graders in one sample is at the 90th percentile of the one used for the tables. Thus, any interpretation of a score must be quite tentative, at best. Although this would seem to be a major limitation, the manual states, "the author and publisher will continue to accumulate comparison group norms on a variety of kinds of populations ranging from kindergarten through graduate school. There is no plan at the present time to compile what might be called 'children-in-general' type norms." Thus, the norms will apparently continue to be based on restricted, available samples. This tends to make any interpretation of the scores, even in research projects, very tentative. The interpretations provided for the scale scores are clear, but seem to go beyond the evidence.

F. *Parent Survey:* In addition to measure obtained directly from testing the pupil, it was decided that a survey of parent perceptions of the program's effect would be conducted. Accordingly, a survey questionnaire was drafted which contained four major parts:

- A solicitation for parents to directly assess the effects of the program in the five major evaluation concern areas.
- A request for parents to identify their sources of information about the program.
- An invitation for parents to comment on the strengths and weaknesses of the program.
- A request for parents to provide an overall rating of the quality of the program.

The draft questionnaire was reviewed by the program staff; the revised version was set in type on and IBM composer and was readied for distribution.

G. *Archival Measures:* Several ancillary pieces of information were selected to permit a more extensive analysis analysis of the results of the study. These were obtained from the archives of the Alexandria school system; they are:

1. Age
2. Sex
3. Grade
4. Ethnic background
5. School Lunch Subsidy Code
6. Total days membership in the program
7. Total days absence from the program

This information was generated by the program staff.

APPENDIX B

AIDS TO INTERPRETING STATISTICAL RESULTS

EXPLANATION OF "SIGNIFICANCE"

It is always possible that statistical information may appear to have meaning and yet be absolutely unrelated to the phenomenon from which they were abstracted. For example, it is *theoretically* possible that a person throw a deck of cards into the air and have all the black cards land to his left and the red to his right—however, experience has taught us that this is extremely unlikely to happen. Thus, if we were to witness such a performance, we would not attribute the results to "chance" or "coincidence" but rather to some skills or artifice of the card-thrower.

Statistical techniques have evolved to assist in the making of similar decisions about the likelihood of data appearing in meaningful patterns without any underlying reason. In particular, the *analysis of variance/covariance* is a technique for examining the effects of several variables at once.

The technique permits the assessment of the likelihood that a given arrangement is due to "chance"—and yields information in the following form:

(p L.T. .05)

This is read: the probability (p) that a given arrangement could have occurred by chance is less than (L.T.) five times out of 100. The "cutting point" where researchers rule out "chance" or "random arrangement" of data as an explanation of a phenomenon is .05.

Explanation and Interpretation of Components in the Analysis of Variance/Covariance

A Significant Effect of Each of These Terms:	Is Interpreted As
Gifts Main Effect	Averaging over program options and trials, the academic group is significantly different from the talented group.
Groups Main Effect	Considering academic and talented together and averaing over trials, the three program options are different from each other.
Trials Main Effect	Averaging over program options and academic/talented, the post measures are significantly different from the pre measures.
Gifts by Groups Interaction	Averaging over trials, the difference between academic and talented groups varies significantly among the program options.
Gifts by Trials Interaction	Averaging over program options, the academic group experienced a significantly different change from pre to post than did the talented.
Groups by Trials	Averaging over academic and talented, one or more of the program options experienced a significantly different change from pre to post than did the others.
Gifts by Groups by Trials	Of the six individual combinations of gift (academic/talented) and option (IA/CLC/ENR), some experienced significantly more change from pre to post than did the others.

In general, the between groups comparison (gifts, groups, gifts by groups) do not necessarily indicate or support the effects of an educational program (i.e., one which intended to produce change) because they average over trials.

A unitary effect of trials is also not necessarily an argument for the effectiveness of a program, because of the averaging over "gift" and program option: thus, the effects could be explained by a process of maturation.

The interaction between "gift" and trials is also not conclusive evidence because it is subject to the alternative explanation that the academic and talented groups simply progress at different rates.

The interactions involving groups and trials (O x T and G x O x T) provide the clearest tests of the effects of the program. Examination of these interactions provides the most definitive picture of the program effects when a control group (which receives no treatment) is included. Since this study could not include such a group, the ability to infer program effects from groups by trials and gifts by group by trials interactions is diminished somewhat, although such significant interactions are support for concluding that differences exist among the options.

APPENDIX C

SUMMARY OF COMMENTS MADE BY PARENTS

SUMMARY OF PARENT COMMENTS
CHARLES BARRETT SCHOOL

I. Academic Subgroup
   A. Strengths
      1. Chance for each child to develop up to full potential
      2. Teacher is very effective in relating to the pupils (2)
      3. Child's personality was beneficially developed
      4. Stimulating discussions, group projects, accelerated pace (2)
      5. Motivation of pupils
      6. Opportunities for individual growth and learning
      7. Gives child practice in being a self-starter
      8. Individualized math
      9. Regular class was too easy
   B. Weaknesses
      1. Beneficial differences due to excellent teacher, not program
      2. The label "gifted" may impair later social development
      3. Program needs emphasis on social development

II. Talented Subgroup
   A. Strengths
      1. Constant exposure to new ideas
      2. Child can express his talent
      3. Enhanced learning at a faster rate
      4. Eliminates boredom
   B. Weaknesses
      1. Art program needs to be restructured
      2. Not enough information to parents
      3. "Social fallout"

SUMMARY OF PARENT COMMENTS
PATRICK HENRY SCHOOL

I. Academic Subgroup
   A. Strengths
      1. Science experiments (dissecting a shark)
      2. Children respond to special personal attention
   B. Weaknesses
      1. More information sent to parents
      2. Program should be professionally managed
      3. More interaction between teacher and parents

II. Talented Subgroup
   A. Strengths
      1. Program has relieved psychosomatic disorders in child
      2. Director in orchestra knows everyone by name
      3. Chorus is excellent
   B. Weaknesses
      1. Too much testing
      2. Lack of ability to contact people

SUMMARY OF PARENT COMMENTS
STONEWALL JACKSON SCHOOL

I. Academic Subgroup
   A. Strengths
      1. Pushes child to do more in regular classes
      2. Regular classes are boring to child
      3. Opportunity to do special projects and broaden interests
      4. "None"
      5. Child seems to be happy
   B. Weakenesses
      1. Children who are "singled out" may be "terrorized"
      2. "Child shouldn't make decision about attending regular or gifted class"
      3. Program conflicts with regular classwork
      4. "None"

II. Talented Subgroup
   A. Strengths
      1. "Teacher motivation of child," "status symbol"
      2. Expert instruction, new skills, and motivation
      3. Helps bring out hidden ability
      4. Feeling of confidence, accomplishment
      5. Opportunity to go beyond normal classroom work
   B. Weaknesses
      1. Standards for selection are arbitrary
      2. Physical education is play only--doesn't develop skills
      3. Lack of communication with parents
      4. Students find it difficult to keep up with classwork (3)
      5. Transportation to all city band and chorus

SUMMARY OF PARENT COMMENTS
ROBERT E. LEE SCHOOL

I. Academic Subgroup
   A. Strengths
      1. Opportunity to explore areas which might be missed
      2. High calibre teachers
      3. Increased self confidence
   B. Weaknesses
      1. Shouldn't interfere with regular classroom work
      2. Insufficient communication with parents

II. Talented Subgroup
   A. Strengths
      1. Provides art training to children whose parents couldn't afford it
      2. Excellent teacher
   B. Weaknesses
      1. Difficult to find information on program
      2. Emphasis on studio art

SUMMARY OF PARENT COMMENTS
LYLES-CROUCH SCHOOL

I. Academic Subgroup
   A. Strengths
      1. Children who do well are encouraged
      2. Students feel that "someone cares"
      3. Students are taught skills not covered in regular classes
      4. Ms. Caldwell is an excellent teacher (3)
      5. Working on projects creates stimulating atmosphere
      6. Small classes, individual attention, interesting material
      7. Involvement in writing and research
      8. "Shakespeare"
      9. Oral expression and peer criticism

   B. Weaknesses
      1. Less required standardized testing (2)
      2. More detailed evaluation of pupil progress
      3. Pressure to compete may be intense
      4. C.L.C. subjects should be compatible with regular courses
      5. Child should be involved in more areas
      6. More homework should be given
      7. Need to decrease pupil/teacher ratio
      8. Criteria for selection should be performance, not IQ
      9. Students are ostracized by peers
      10. Scheduling problems
      11. Should start in second or third grade
      12. More emphasis on basics
      13. More emphasis on science and math

II. Talented Subgroup
   A. Strengths
      1. General enrichment of child's experience in school
      2. Bringing out child's potential

   B. Weaknesses
      1. Not enough information

SUMMARY OF PARENT COMMENTS
DOUGLAS MACARTHUR SCHOOL

I. Academic Subgroup
   A. Strengths
      1. Encourages exploration and discovery
      2. Widening of learning horizon
      3. More personal attention, improved self image
   B. Weaknesses
      1. More integration with regular classwork
      2. Increase depth and duration of projects
      3. Problems with classwork missed because of participation in program
      4. HEP teacher doesn't communicate with regular classroom teacher
      5. Sacrifice of basic skills to "exotic" topics like "income tax"

II. Talented Subgroup
   A. Strengths
      1. Focus on specific talents and abilities
      2. Extra instruction
   B. Weaknesses
      1. Too little communication
      2. Program tried to spread itself too thinly

SUMMARY OF PARENT COMMENTS
GEORGE MASON SCHOOL

I. Academic Subgroup
   A. Strengths
      1. Opportunity to work at a pace suited to ability and interest
      2. Keeps child busy and interested
      3. Children's respect for teacher
      4. Better utilization of child's abilities
      5. Teacher (Mrs. Race) is excellent
      6. Children can "stretch" their minds
   B. Weaknesses
      1. Objection to testing
      2. Children should not be treated as "miniature adults"
      3. C.L.C. has made child an isolate

II. Talented Subgroup
   A. Strengths
      1. Children can progress at their own rate
      2. Children can associate with others who have talent
      3. Exchanging thoughts through creative ability
   B. Weaknesses
      1. Selection criteria should be changed
      2. Instrument rentals are too high ($120/year for French Horn)

SUMMARY OF PARENT COMMENTS
MOUNT VERNON SCHOOL

I. Academic Subgroup
   A. Strengths
      1. Emphasis on creativity
      2. Learning things beyond grade level
      3. More freedom, flexibility, different classmates
      4. Teacher is excellent
   B. Weaknesses
      1. Gifted program not available at middle school
      2. Lack of communication between regular teacher and gifted teacher
      3. Interferes with classwork
      4. Child should be graded on what he does in program
      5. Don't know anything about the program

II. Talented Subgroup
   A. Strengths
      1. Child loves program
      2. Enhances child's awareness of special abilities
      3. Helps talented child develop as a whole person
   B. Weaknesses
      1. Too much time out of class (3)
      2. Children have to pay for instruments that PTA bought
      3. Singles children out as "superior"
      4. Parents need more information about program

SUMMARY OF PARENT COMMENTS
WILLIAM RAMSAY SCHOOL

I. Academic Subgroup
   A. Strengths
      1. Program doesn't remove child from class
      2. Creative approach and challenge to individuality
      3. Opportunity, motivation, character building
      4. Ms. Jones science and math projects
      5. Research and planning behind the project
      6. Inspiring teachers
      7. Child can progress at own rate
   B. Weaknesses
      1. Reading and language arts didn't capture child's attention (2)
      2. HEP's cannot get from class to class in enough time to service students
      3. Regular teachers don't have enough information

II. Talented Subgroup
   A. Strengths
      1. Chance to explore different art media
      2. Child very proud of achievements
   B. Weaknesses
      1. Insufficient time–needs to be more than once per week
      2. More feedback from program

SUMMARY OF PARENT COMMENTS
JOHN TYLER SCHOOL

I. Academic Subgroup
   A. Strengths
      1. Child can associate with others of superior ability (3)
      2. Presence of equipment not available in regular classroom
      3. Identification as "gifted" will help in later academic work
   B. Weaknesses
      1. Teacher should be responsible for part of grading
      2. Regular teachers are hostile to program (2)
      3. Scheduling difficulties

II. Talented Subgroup
   A. Strengths
      1. Gifts don't go "to waste"
      2. Child can grow and develop
      3. Enrichment of regular activities
   B. Weaknesses
      1. Lack of cooperation from regular classroom teacher
      2. Program should expanded
      3. Parents should receive more information

APPENDIX D

SPECIMEN COPIES OF
PARENT AND TEACHER SURVEY FORMS

Program for the Gifted & Talented
Alexandria Public Schools
QUESTIONNAIRE FOR PARENTS

Hello. The Alexandria Public Schools have commissioned this survey to include the observation, concerns and feelings of parents in the improvement and evaluation of the program for the gifted and talented. Since these decisions will affect the future of the program, it is important that you make your voice heard by completing and returning this form.

Directions. This questionnaire asks you to provide both objective and subjective information; we invite you to write as much as you wish about any of the topics that are on this form and to discuss any that may have been omitted. You may attach extra sheets of paper of your own. We would, however, appreciate your completion of the questions which ask you to give your opinions on an **Attitude Scale** as demonstrated below.

Example: How do you feel about baseball?

( ) ( ) ( ) (X) ( )

love it hate it

Comment: I prefer football.

In this example, the respondent has indicated that he is not fond of baseball and has used the space marked "comment" to clarify his response. (Use of this space is optional.)

Confidentiality. You need not place your name on this questionnaire. Comments made by individuals will never be used in any public discussion of the results.

1. Please describe each of your children that are in the program for the gifted and talented by checking the box that applies.

	SEX		GRADE			PROGRAM TYPE		SCHOOL (fill in)
	male	female	4	5	6	Academic	Talented	
Child 1	( )	( )	( )	( )	( )	( )	( )	_____
Child 2	( )	( )	( )	( )	( )	( )	( )	_____
Child 3	( )	( )	( )	( )	( )	( )	( )	_____

2. Read through the following list and do two things: (a) indicate those persons with whom you *have* discussed the Gifted and Talented program; and (b) indicate those persons that you *would like* to talk to:

PERSON	Have talked to	Would like to talk to
Child's classroom teacher	( )	( )
Child's principal	( )	( )
Child's teacher in gifted program	( )	( )
School psychologist	( )	( )
School administrator	( )	( )
Other_____	( )	( )

3. To what extent have you been informed about your child's progress in the Gifted and Talented program?

( ) ( ) ( ) ( ) ( )

have received little or no information — have received much information

Comment: _____

4. From your view as a parent, estimate how the Gifted and Talented program has affected your child's progress in school in comparison with the period before he entered the program.

( ) ( ) ( ) ( ) ( )

child has accomplished much more in school — child has accomplished much less in school

Comment: _____

5. Estimate how the program has affected your child's *creativity*.

( ) ( ) ( ) ( ) ( )

child is much less creative — about the same — child is much more creative

Comment: _____

(continued on reverse side)

6. Estimate how the program has affected your child's relations with other children.

( )	( )	( )	( )	( )
child gets along with others much better		about the same		child gets along with others much worse

Comment: _____

7. Estimate how the program has affected how your child feels about himself.

( )	( )	( )	( )	( )
child is much more confident of himself		about the same		child is much less confident of himself

Comment: _____

8. Estimate how the program has affected your child's attitude towards learning?

( )	( )	( )	( )	( )
child is much *less* enthusiastic about learning		about the same		child is much *more* enthusiastic about learning

Comment: _____

9. What do you think the best parts of the Gifted and Talented program are? _____

_____

_____

_____

10. What parts of the Gifted and Talented program should be changed? _____

_____

_____

_____

11. Considering everything, how would you rate the Gifted and Talented program?

( )	( )	( )	( )	( )
excellent				poor

Comment: _____

You may use the space below for any additional comments; feel free to attach additional sheets if you wish. When you have completed this form, please place it in the return post-paid envelop and drop it in the mail. Thank you.

QUESTIONNAIRE FOR CLASSROOM TEACHERS

The purpose of this survey is to solicit your opinions about the *Program for the Gifted and Talented* as part of an ongoing evaluation study. Participation in this survey is entirely voluntary on your part.

The study is being conducted by Dr. Frank Morra of the University of Virginia as an impartial third-party effort. It is requested that you *not* place your name on this form. If you should elect to participate in this study, please complete the following few brief questions and return the form in the attached post-paid envelope. All individual results will be kept in strictest confidence and only summary statistics will be reported to program management.

Several of the items on this form request that you use an *attitude scale* as demonstrated below:

How do you feel about baseball?

( ) ( ) ( ) ⊗ ( )

Love It — Hate It

Comment: I prefer football

You are encouraged to make use of the "Comment" space; further, if you feel that a topic has not been adequately treated, please enclose a separate sheet detailing your concerns.

1. Please rate the extent to which you have been informed about the Program for the Gifted and Talented:

from G & T teachers	( )	( )	( )	( )	( )
from principal	( )	( )	( )	( )	( )
	I have received little or no information				I have received much information

Comment: _____

2. Please assess the adequacy of the training or preparation that you received for working with the staff of the Gifted and Talented program:

( ) ( ) ( ) ( ) ( )

very inadequate — inadequate — very adequate

Comment: _____

Please provide any suggestions which you feel may improve the training or preparation of teachers to work with the staff of the Gifted and Talented program:

_____

_____

_____

_____

3. Please rate the extent to which you have had professional (*i.e.*, not social) contact with the staff of the Gifted and Talented program:

( )	( )	( )	( )	( )
Contact has been very frequent				Contact has been very infrequent

Comment: _____

4. Please assess the extent to which materials, ideas, suggestions and the like have been exchanged between the Gifted and Talented program and your classroom:

( )	( )	( )	( )	( )
Very little or none at all				To a large extent

Comment: _____

5. Please rate the extent to which you have received feedback from the Gifted and Talented program about the progress of pupils in your classes:

( )	( )	( )	( )	( )
Detailed feedback received				Little or no feedback received

6. Various aspects of the Program for the Gifted and Talented (G & T) affect the classroom routine in several ways; please rate the extent to which the following activities have affected your classroom routine:

ACTIVITIES	Little Effect				Severe Disruption
Art or Music pupils leaving the classroom	( )	( )	( )	( )	( )
Academic pupils leaving the classroom	( )	( )	( )	( )	( )
Working with G & T program staff	( )	( )	( )	( )	( )
Preparation of reports on G & T pupils	( )	( )	( )	( )	( )

If any other activities of the Gifted & Talented program have had effects on your classroom routine, please describe them:

_____

_____

_____

7. Have any of the activities of the Program for the Program for the Gifted and Talented made a contribution to your classroom?

( ) Yes ( ) No

If you answered "Yes," please describe them below:

_____

_____

_____

8. Please rate your attitude toward differentiated education for both the handicapped and the gifted:

	Can be very detrimental				Can be very beneficial
Differentiated education of the handicapped	( )	( )	( )	( )	( )
Differentiated education of the gifted	( )	( )	( )	( )	( )

Comment: _____

9. On the basis of your professional experiences with and observations of pupils involved with the Gifted and Talented program, please rate the extent to which the following types of changes occurred:

	Very few children				Very many children	Can't say
Improvement of self-concept	( )	( )	( )	( )	( )	( )
Improvement in attitude toward learning	( )	( )	( )	( )	( )	( )
Improvement in social relations	( )	( )	( )	( )	( )	( )
Increased academic achievement	( )	( )	( )	( )	( )	( )
Increased creativity	( )	( )	( )	( )	( )	( )

Comment: _____

10. Please assess the extent to which you believe the program for the Gifted and Talented program has produced at attitudes of *elitism* in pupils:

	Very few children				Very many children	Can't say
Type A: Pupils in the G & T program exhibit attitudes of superiority	( )	( )	( )	( )	( )	( )
Type B: Pupils not in the G & T program exhibit attitudes of inferiority	( )	( )	( )	( )	( )	( )

Comments and/or suggestions for improvement: _____

_____

_____

11. Please give your assessment of the selection procedure for the Gifted and Talented program by answering the following questions:

a. On the basis of your professional experience and observation, how many children that are currently *in* the Gifted and Talented program, should *not have been selected?*

	Very few children				Very many children	Can't say
Academic areas	( )	( )	( )	( )	( )	( )
Art, Music or Kinesthetics	( )	( )	( )	( )	( )	( )

b. How many children that are not currently involved with the Gifted and Talented program *should have been selected?*

	Very few children				Very many children	Can't say
Academic areas	( )	( )	( )	( )	( )	( )
Art, Music, or Kinesthetics	( )	( )	( )	( )	( )	( )

c. Please record any comments, observations, and/or suggestions which you may have with respect to selection procedures: _____

_____

_____

Please give your overall assessment of the program for the Gifted and Talented:

( ) ( ) ( ) ( ) ( )

Excellent Poor

( ) Can't say

Comment: _____

12. Have any occasionas arisen in which pupils from the Art or Music talented groups have been able to use these talents in contribution to the work in your classroom?

( ) Yes ( ) No

If you answered "Yes," please describe the nature of this contribution: _____

_____

13. Have you experienced any problems in working with the special instructors for Art, Vocal Music or Instrumental Music?

	No problems	Some problems	Severe problems
Art	( )	( )	( )
Vocal Music	( )	( )	( )
Instrumental Music	( )	( )	( )

Comments and observations: _____

_____

14. Have you attended any performances and/or exhibitions produced by pupils involved in the program for the Gifted and Talented?

	None				All
Last year (i.e., AY 1974-1975)	( )	( )	( )	( )	( )
This current academic year, to date	( )	( )	( )	( )	( )

Comment: _____

_____

15. Please assess the extent to which the Interest Activity (IA) teacher participates in the evaluation of those pupils who are assigned to both your class and the program for the Gifted and Talented. Please check the alternative which best applies.

( ) The IA teacher makes suggestions for the evaluation of each shared pupil, for my action.

( ) I discuss the evaluation of each shared pupil on a case-to-case basis with the IA teacher.

( ) The IA teacher is responsible for the evaluation of the pupil within the subject area(s) for which he or she was selected.

( ) Other (please describe) _____

_____

Comments: _____

16. Please rate the extent to which the pupils' work in the interest activity subgroups either adds to or detracts from the work in the regular classroom:

( )	( )	( )	( )	( )
Greatly enhances classroom work		Neither enhances nor distracts		Seriously detracts from class-room work

Comment: _____

17. Please assess the extent to which pupils were correctly assigned to interest activity groups:

AREAS	Most children placed correctly				Few children placed correctly
Math	( )	( )	( )	( )	( )
Science	( )	( )	( )	( )	( )
Language Arts	( )	( )	( )	( )	( )
Social Studies	( )	( )	( )	( )	( )
Kinesthetics	( )	( )	( )	( )	( )

Comments: _____

_____

15. To the best of your ability, please estimate the number of hours in an average week that the Helping Enrichment Teacher (HET) spends with you in the following activities:

HET ACTIVITIES	Write your estimate of the number of hours in the spaces provided
Observation of pupils	
Working with you in enriching pupil's individual programs	
Working with you in the evaluation of pupil progress	
Working with individual pupils	
Other activities involving either you or pupils (please specify) _____	

Comments: _____

_____

16. To what extent has the HET given you materials or leads to materials for the enrichment of pupil progress?

( ) To a large extent ( ) ( ) ( ) ( ) To little or no extent

Comment: _____

_____

17. To what extent have materials received from the HET added to your entire class (i.e., including those pupils who are not in the Gifted & Talented program?

( ) Have added greatly ( ) ( ) ( ) ( ) Have not added at all

Comment: _____

_____

15. Have you experienced any problems resulting from the arrangements whereby the Curriculum Area Learning Center teacher assigns grades to pupils?

( ) Yes ( ) No

If you answered "Yes," please describe these problems: _____

_____

16. Please rate the extent to which the pupils' work in the Curriculum Area Learning Center either enhances or distracts from the work in the regular classroom:

( )	( )	( )	( )	( )
Greatly enhances classroom work		Neither enhances nor distracts		Seriously distracts from classroom work

Comment: _____

17. Please assess the extent to which pupils were correctly assigned to CLC classes:

CLASSES	Most children placed correctly				Few children placed correctly	Can't say
Math	( )	( )	( )	( )	( )	( )
Science	( )	( )	( )	( )	( )	( )
Language Arts	( )	( )	( )	( )	( )	( )
Social Studies	( )	( )	( )	( )	( )	( )

Comment: _____